



Our Mission:

To improve the practice of public finance in California by providing responsive and reliable information, education and advice.

Rebalancing Your Portfolio

Presented by:

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Amazing Transformations



BEFORE

Amazing Transformations



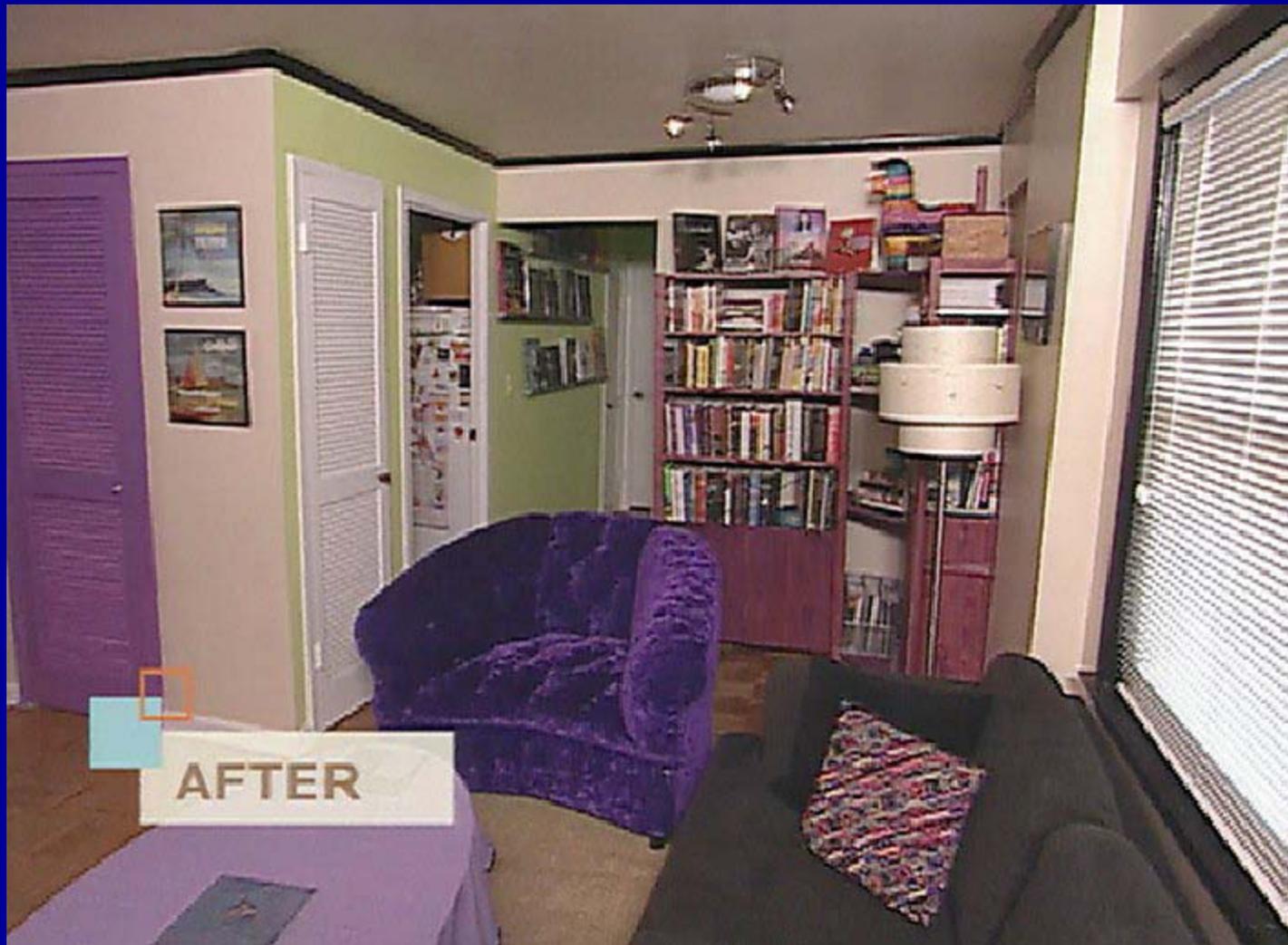
AFTER

Amazing Transformations



BEFORE

Amazing Transformations



Inspiring Action



Before

Inspiring Action



Inspiring Action

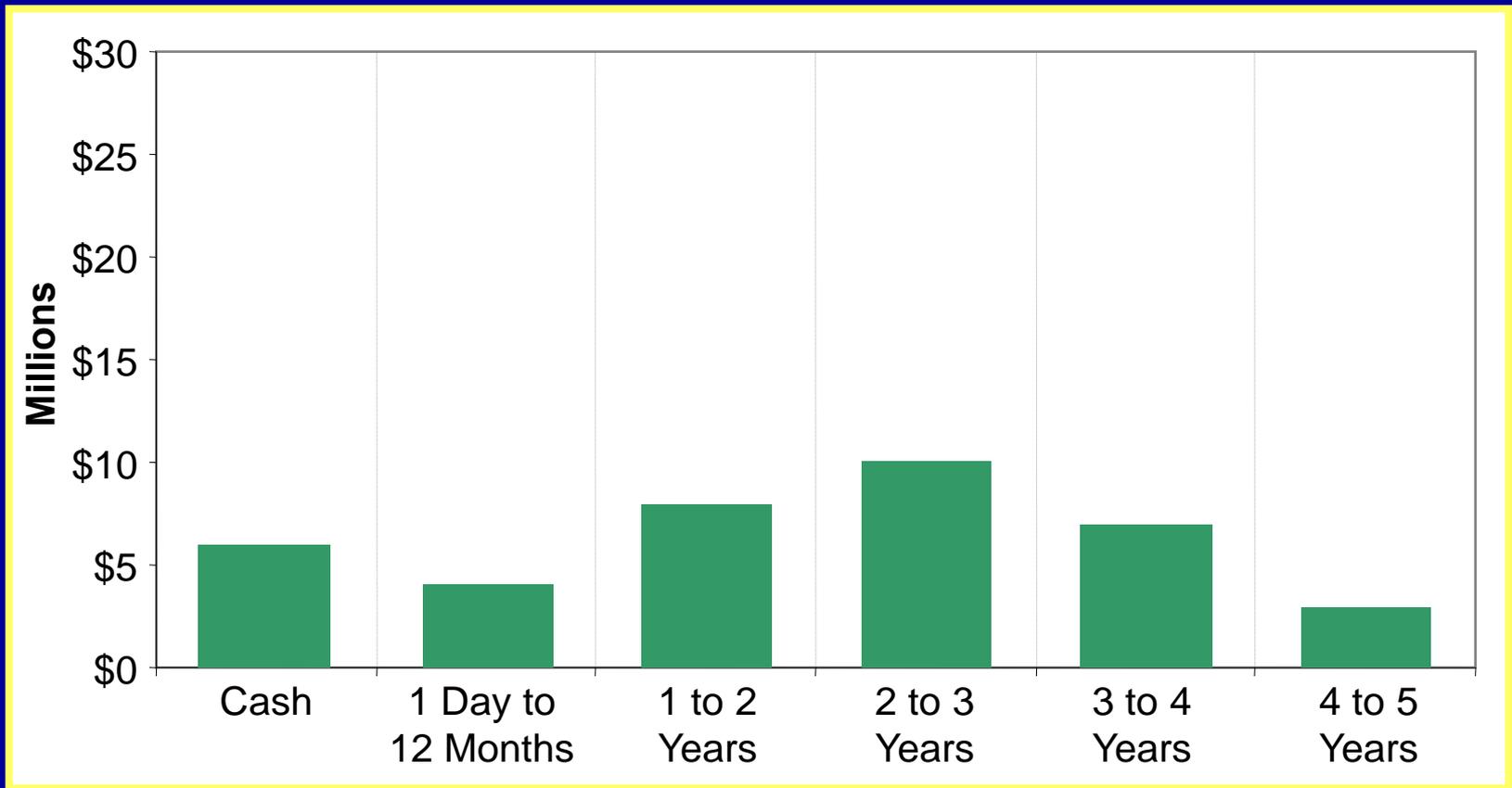


Portfolio Roadmap

- **When managing a portfolio, you need a plan**
 - To have funds available when needed
 - To avoid unnecessary risk
 - To optimize returns

Effect of Time on Portfolio

- If you do nothing, the portfolio will change



What Is Rebalancing?

**Bringing the portfolio
back in line with the
strategy**

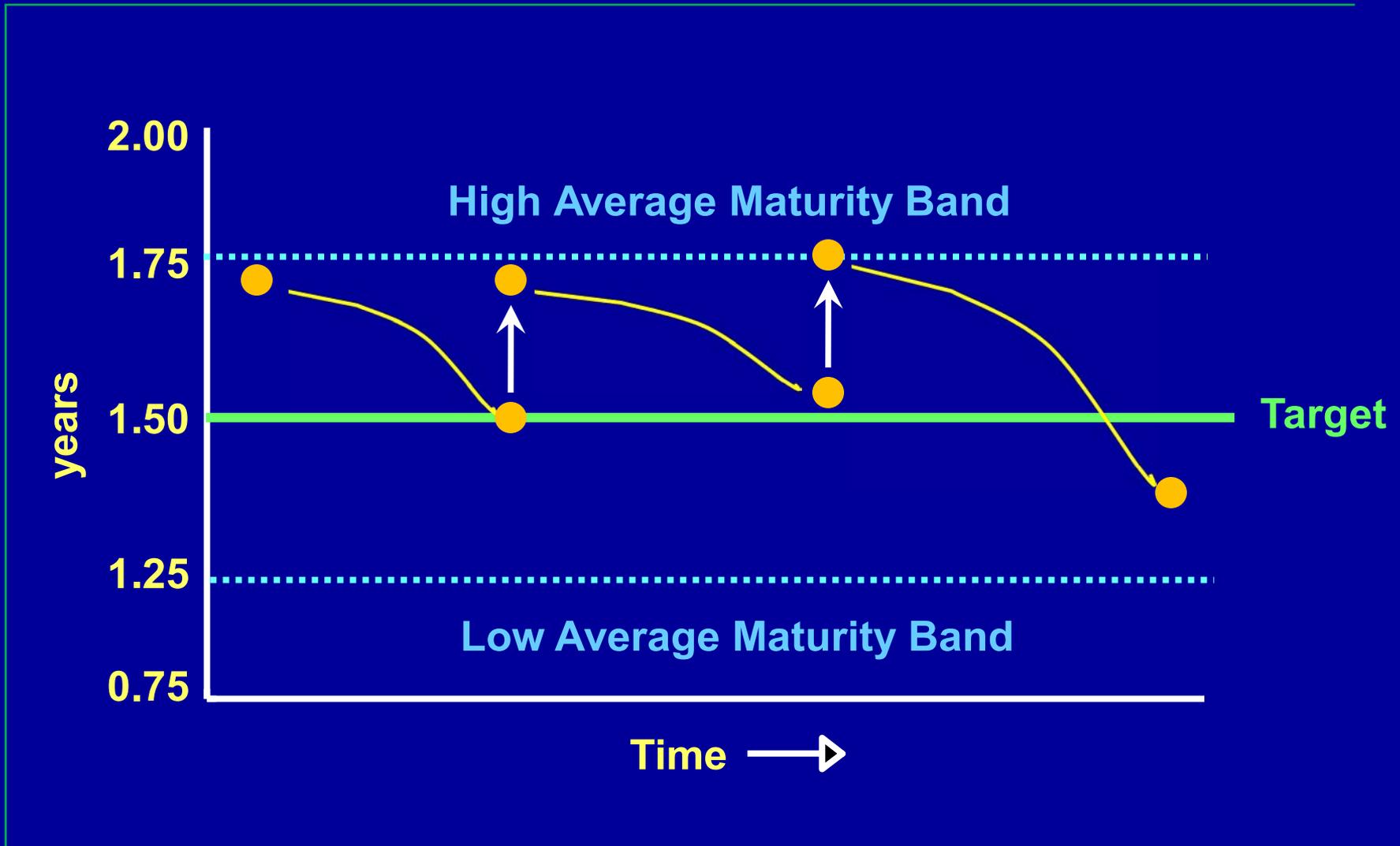
Why Rebalance?

- **Maintain portfolio relative to a target**
- **Something changes**
 - Market conditions
 - Credit quality
 - Investment strategy

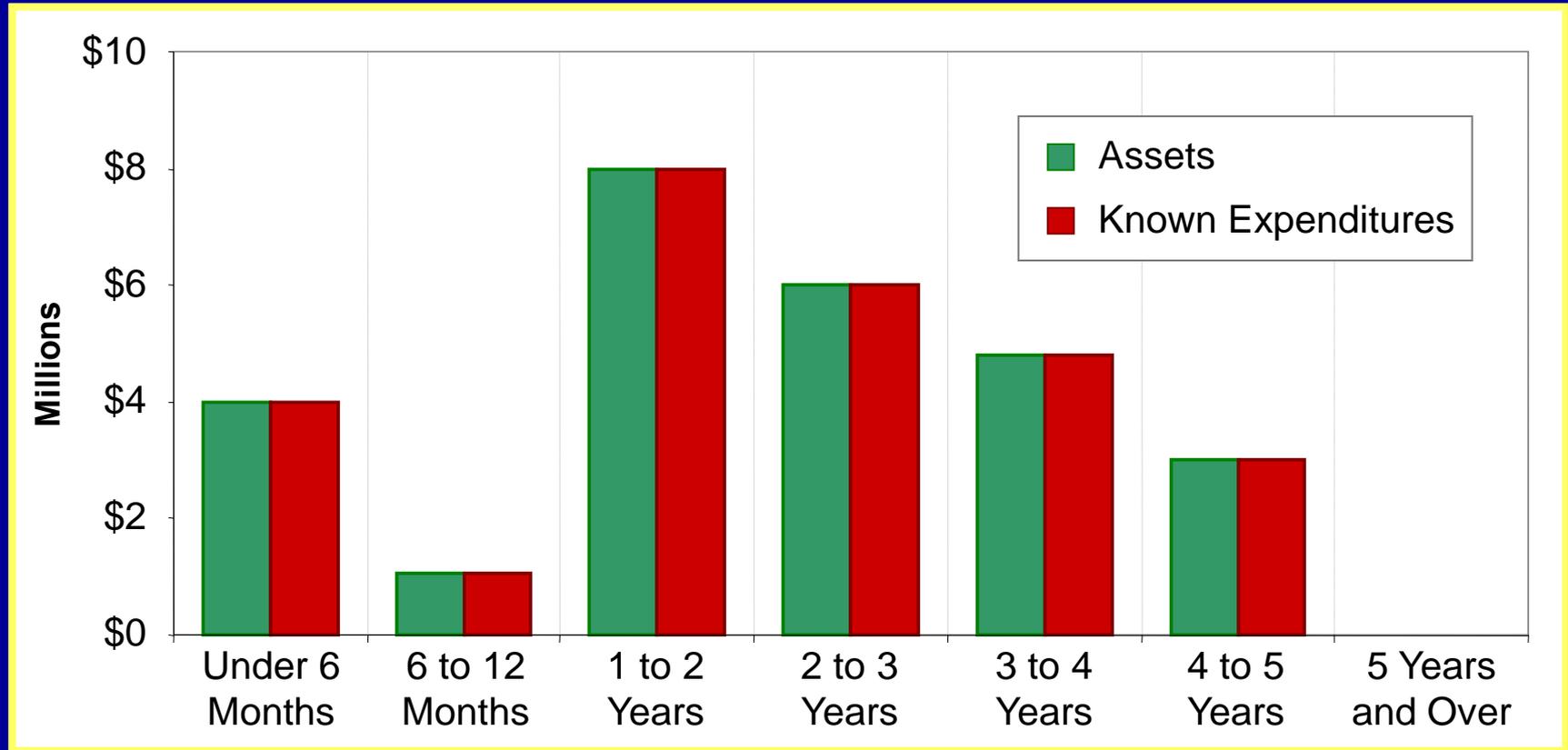
Maintain Portfolio Relative to a Target

- **Average maturity or duration**
- **Matching assets to known expenditures**

Target: Average Maturity or Duration



Target Investments to Spending Dates

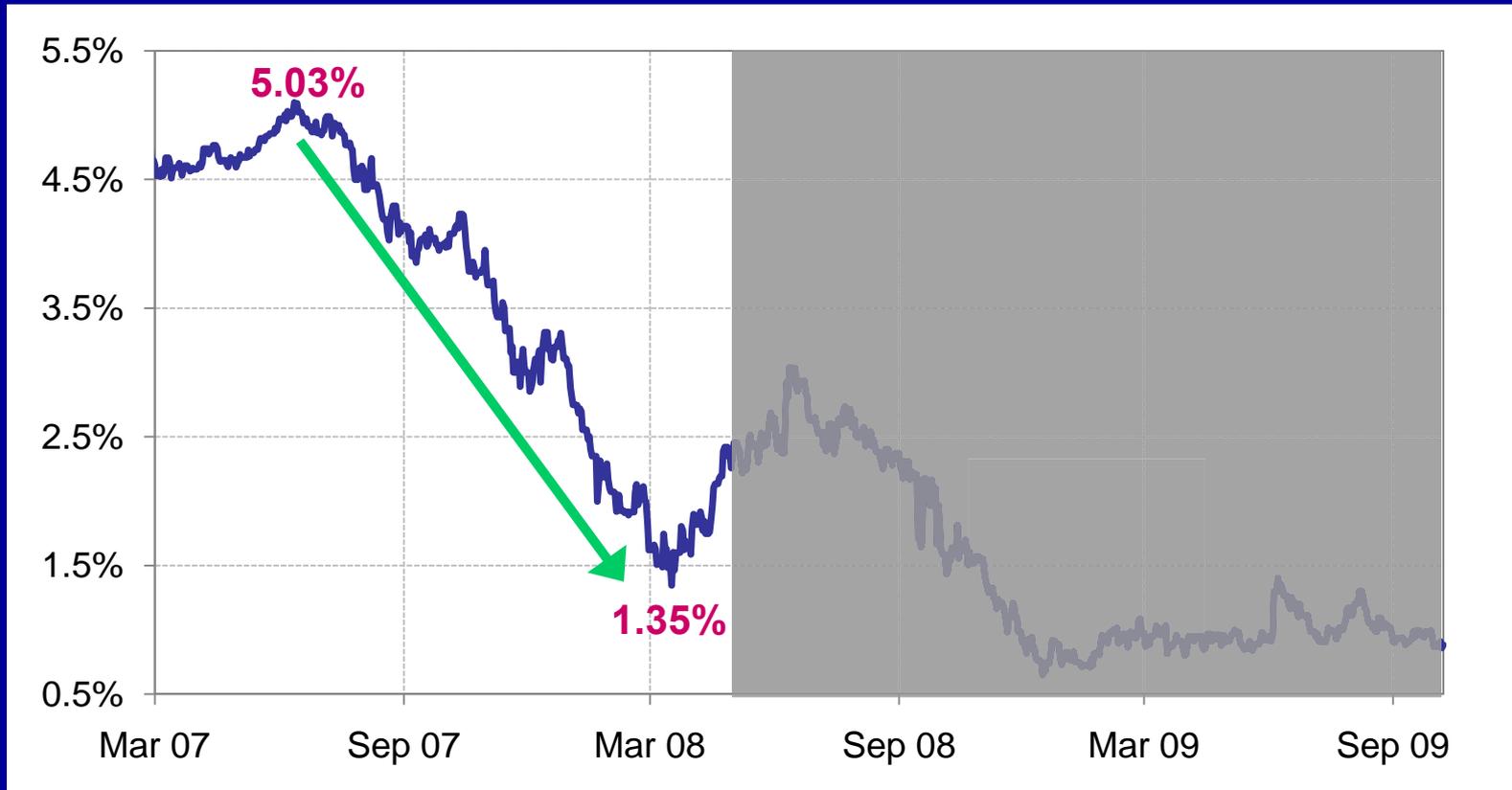


Something Changes: Market Conditions

- **Rising rates**
- **Falling rates**
- **Shape of yield curve**
- **Changes of sector yield spreads**

Market Conditions: Rates Drop

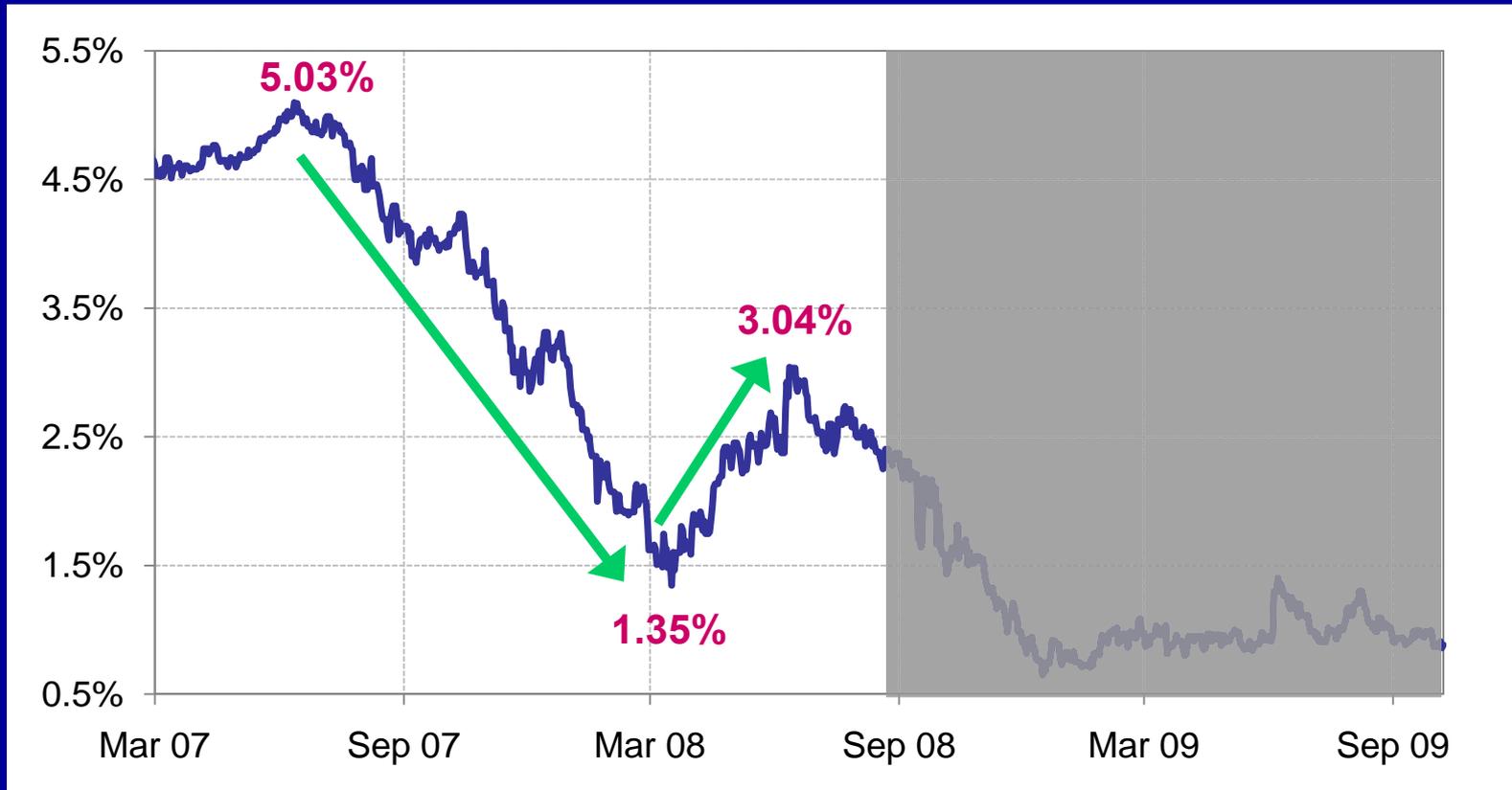
2-Year U.S. Treasury Yield History
March 2007 – October 2009



Source: Bloomberg

Market Conditions: Rates Rise

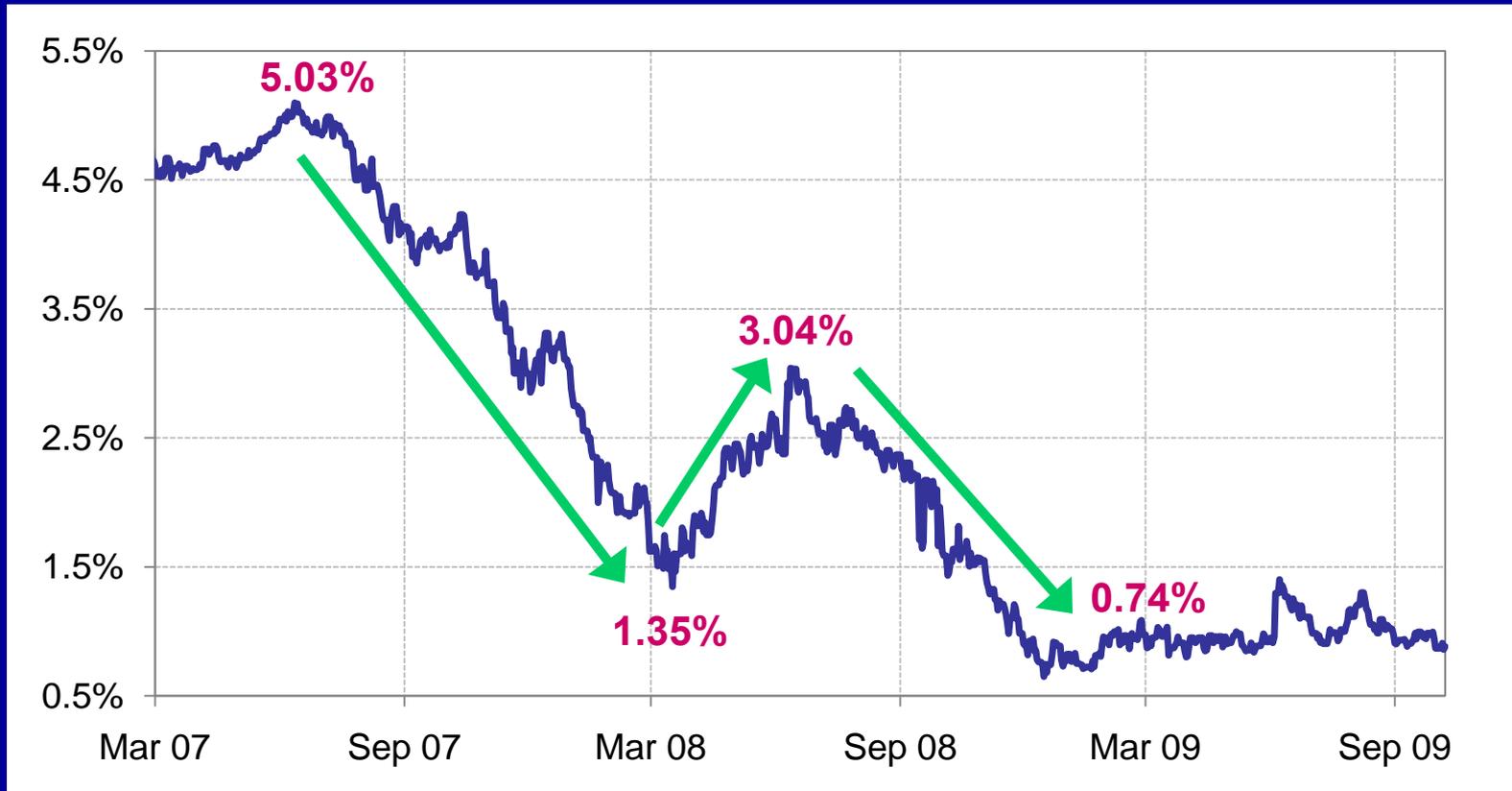
2-Year U.S. Treasury Yield History
March 2007 – October 2009



Source: Bloomberg

Market Conditions: Rates Drop Again

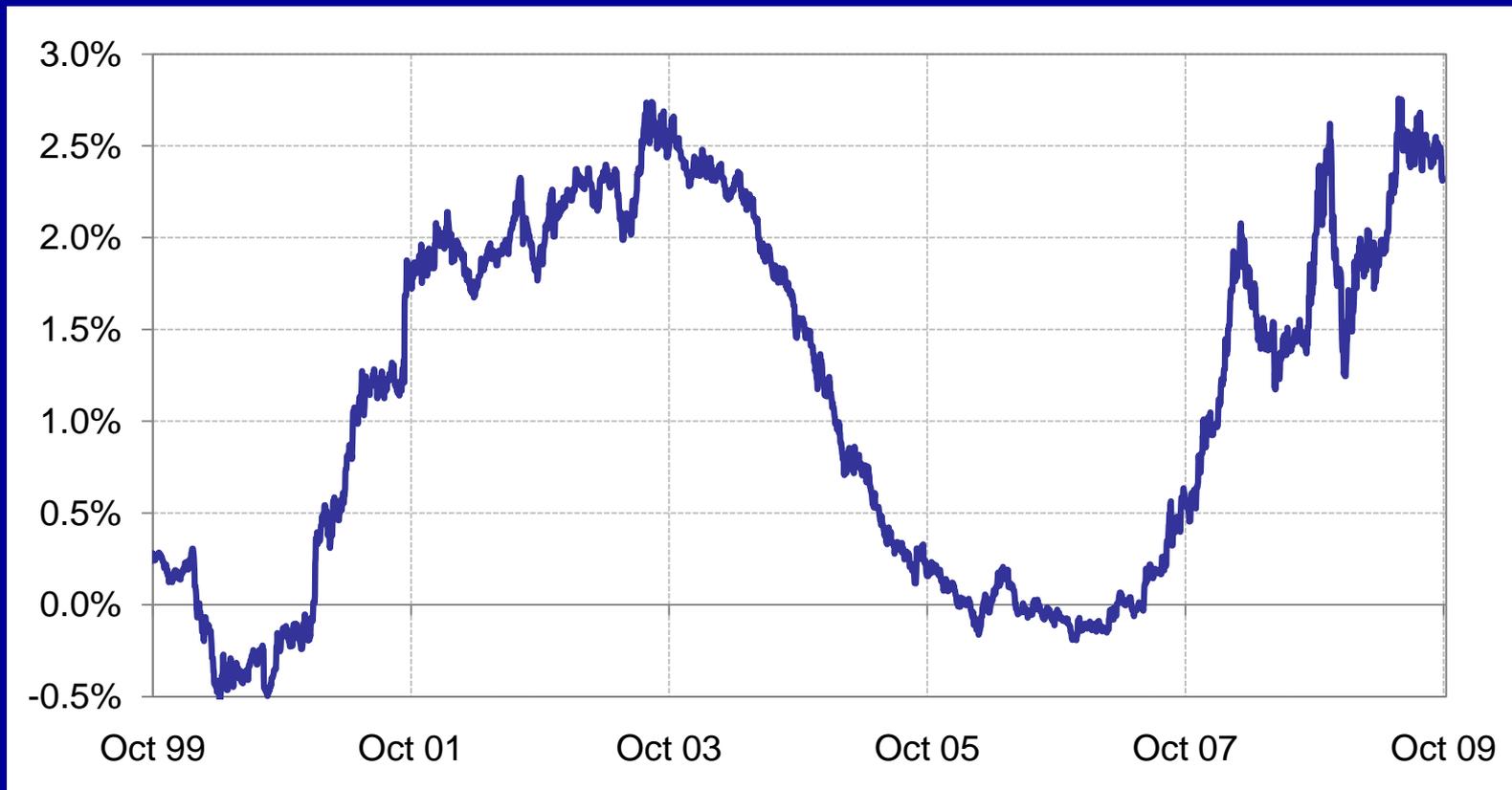
2-Year U.S. Treasury Yield History
March 2007 – October 2009



Source: Bloomberg

Yield Curve Is Extremely Steep

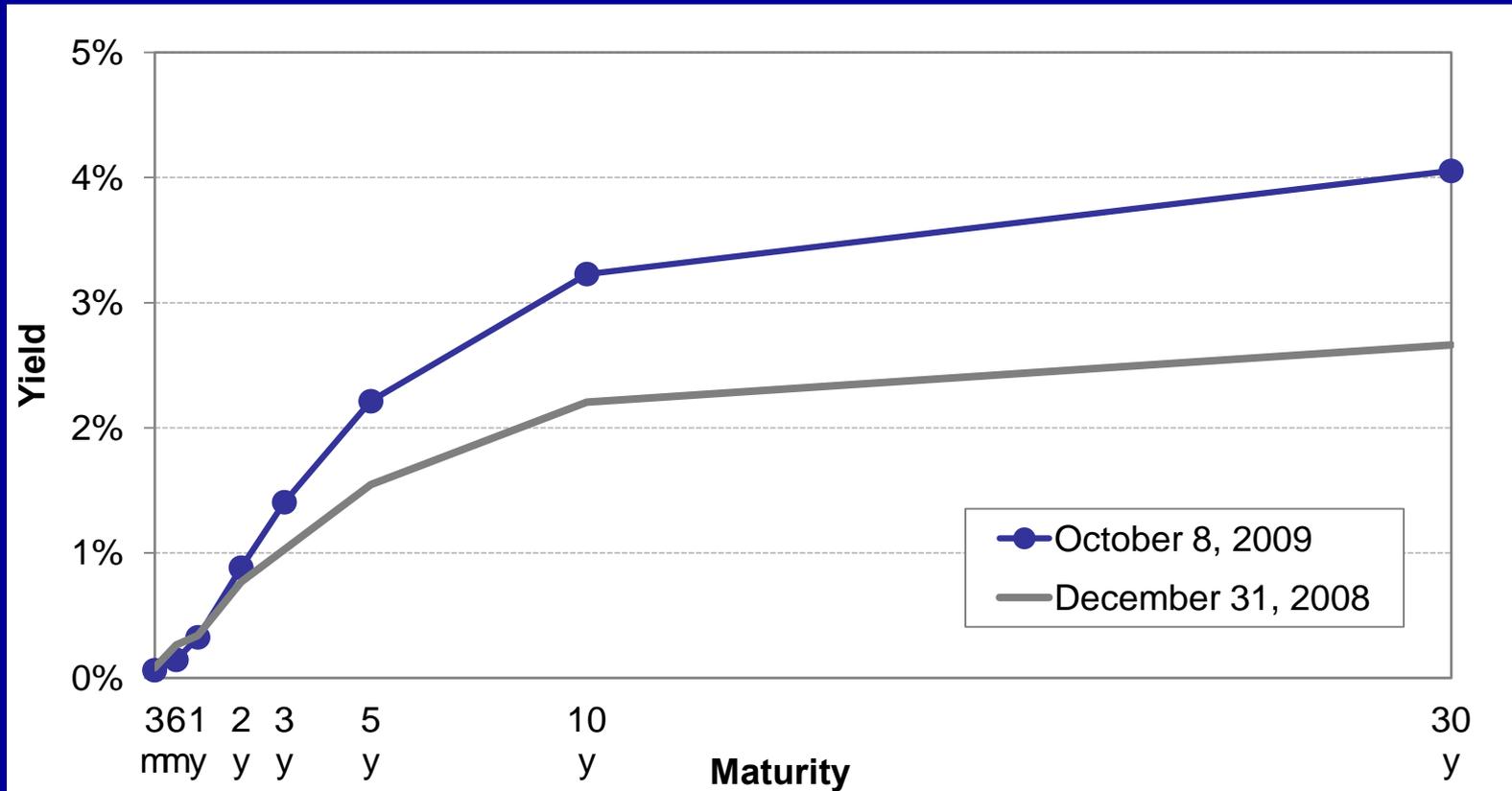
Spread Between 2-Year and 10-Year U.S. Treasury Note Yields
October 1, 1999 – October 8, 2009



Source: Bloomberg

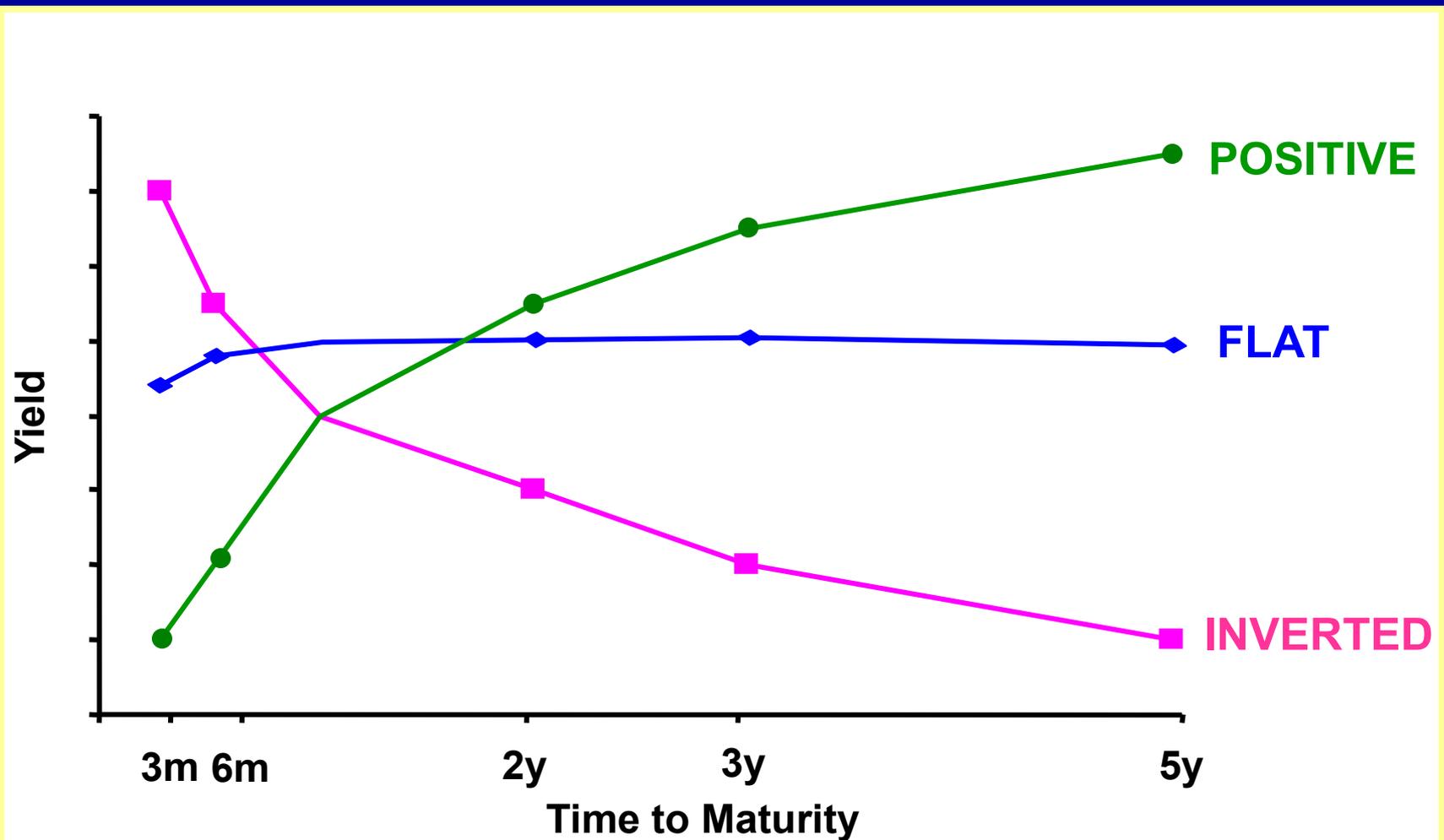
Yield Curve

U.S. Treasury Yield Curve
December 31, 2008 versus October 8, 2009



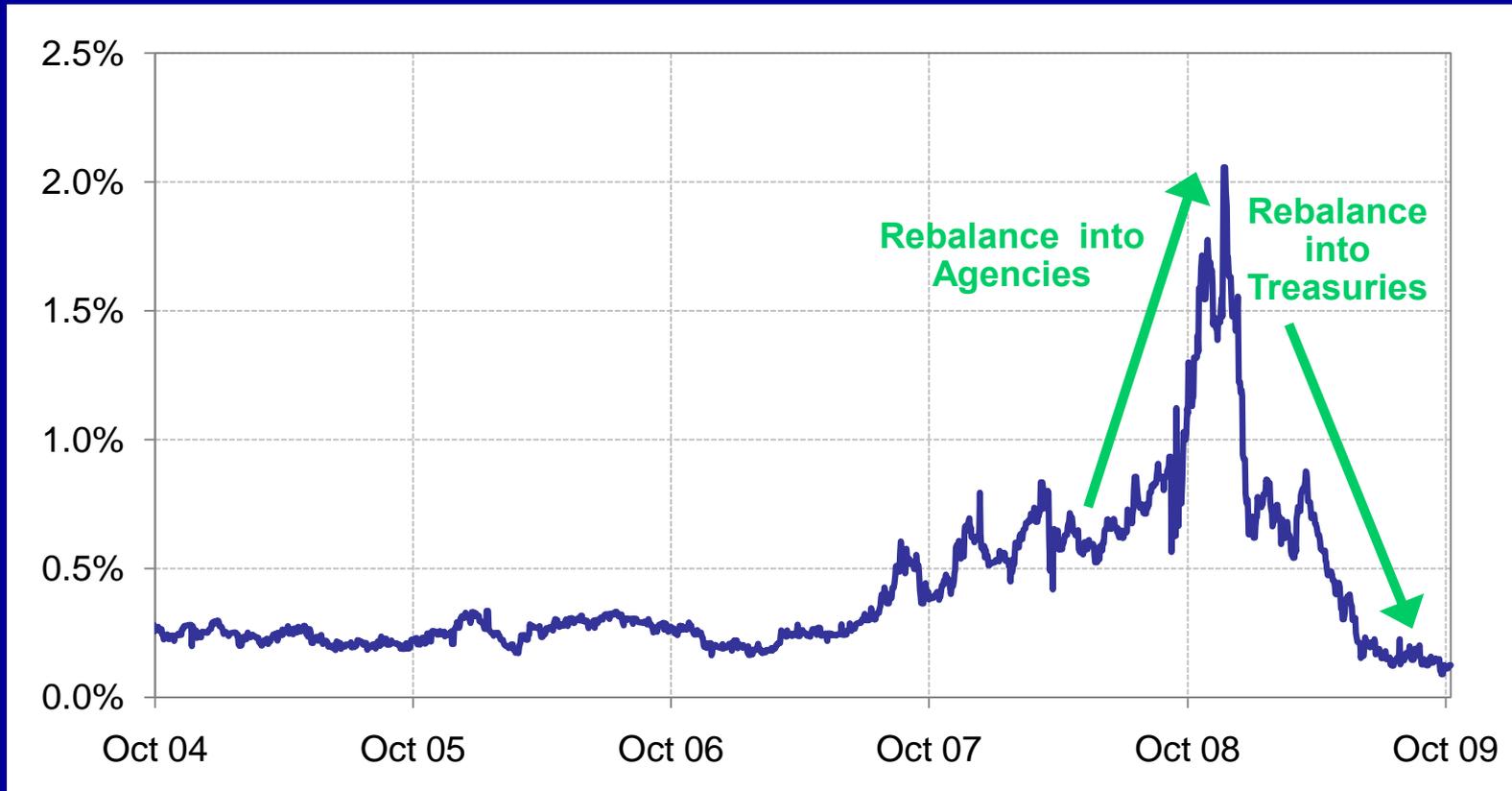
Source: Bloomberg

Market Conditions: Shape of Yield Curve



Changes in Sector Yield Spreads

Spread Between 2-Year U.S. Treasury and Federal Agency Notes
October 2004 – October 2009



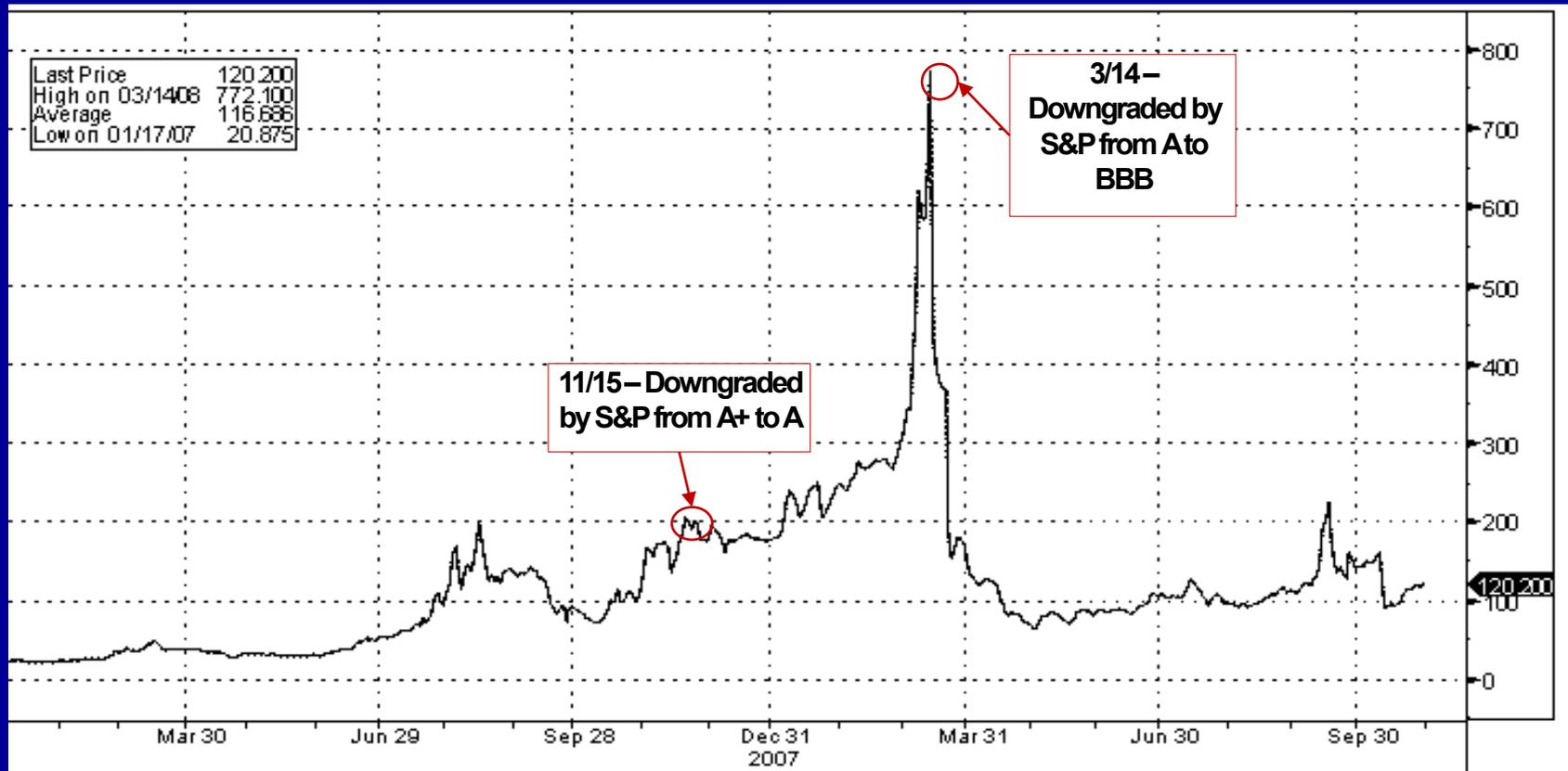
Source: Bloomberg

Something Changes: Credit Quality

- **Changes in corporate ratings**
- **Newspaper headlines**

Credit Quality: Corporate Downgrade

Bear Stearns Credit Default Spread January 2007 – October 2008

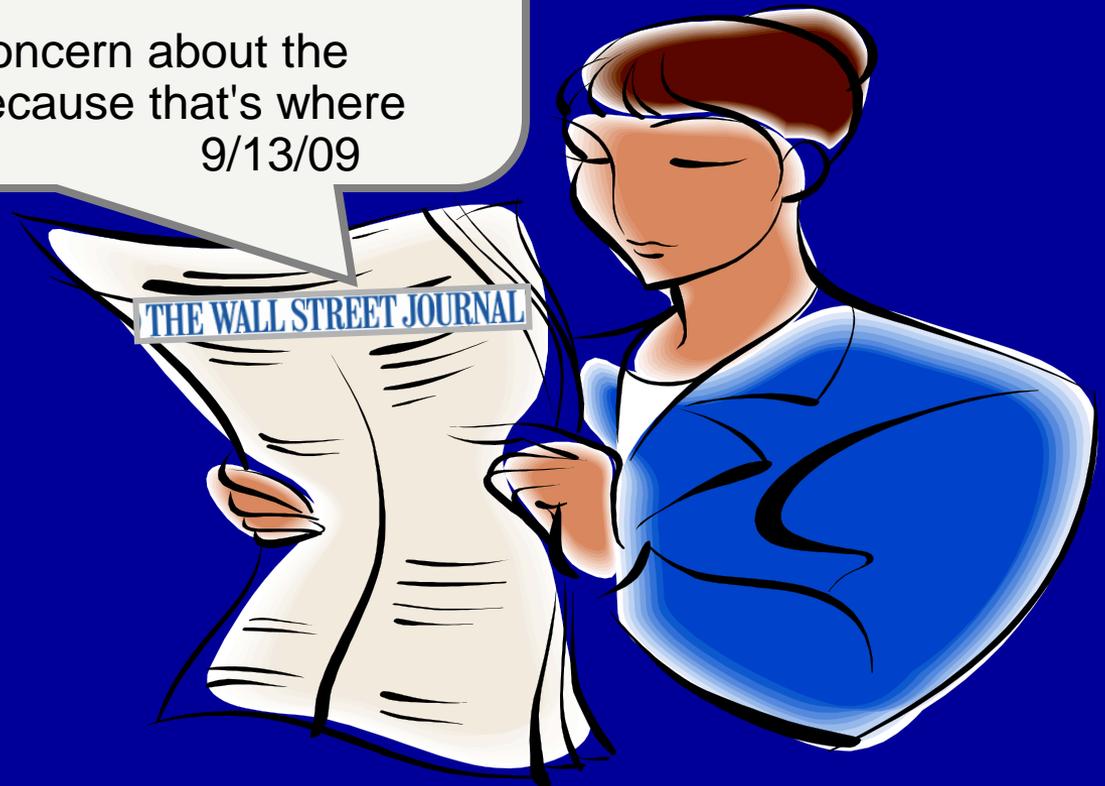


Source: Bloomberg

Credit Quality: Newspaper Headlines

“CIT Group Inc. said it was forced to defer a \$22 million interest payment due next month after failing to meet some conditions in the debt agreement.”

"There has to be some concern about the growth of the portfolios, because that's where the risk is."
9/13/09



Something Changes: Investment Strategy

- **Change in expected cash flow needs**
- **Change in risk tolerance**
- **Desire to improve investment income**

Why Rebalance?

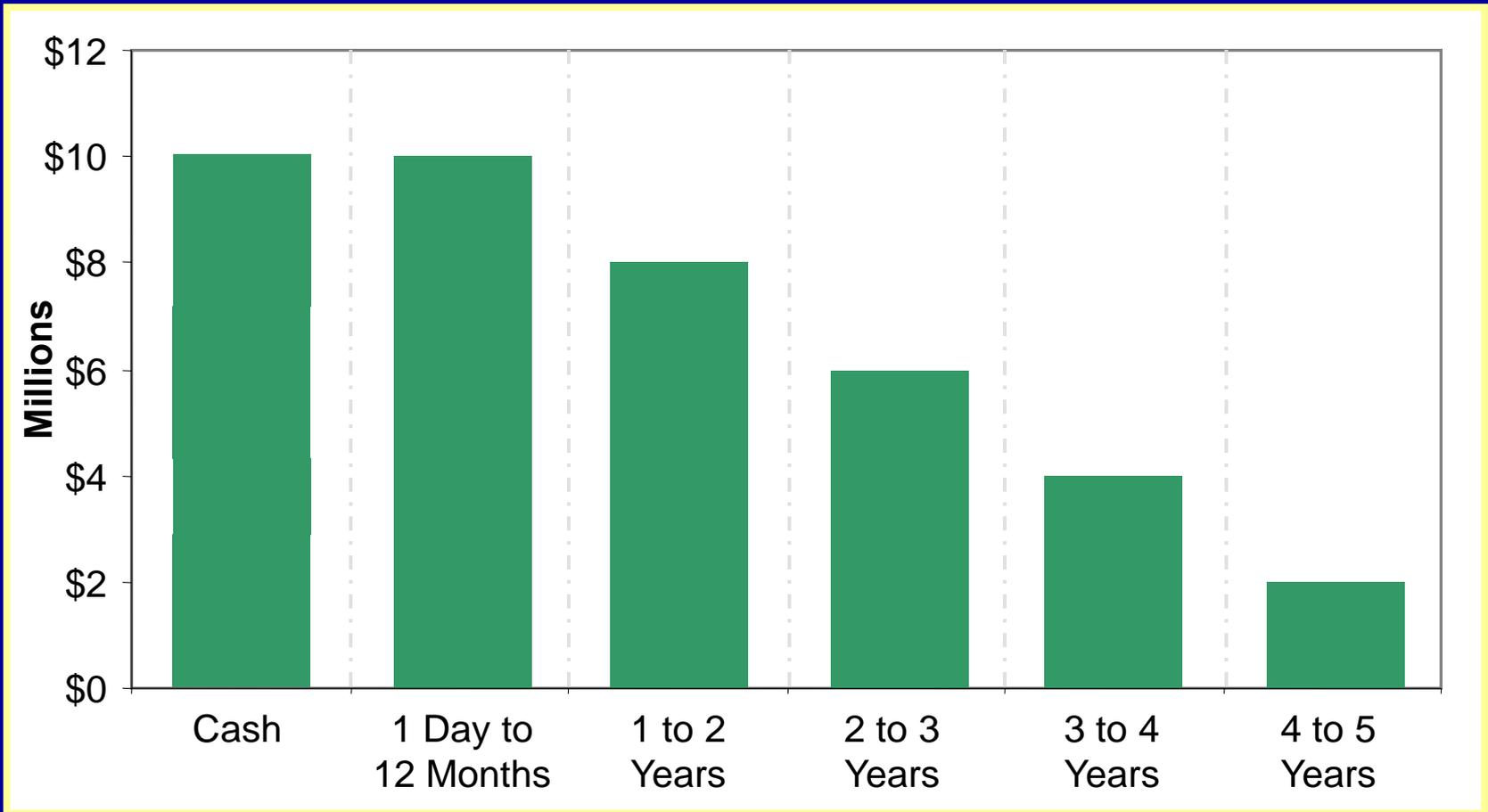
- **Maintain portfolio relative to a target**
- **Something changes**
 - Market conditions
 - Credit quality
 - Strategy

How to Rebalance

How to Rebalance

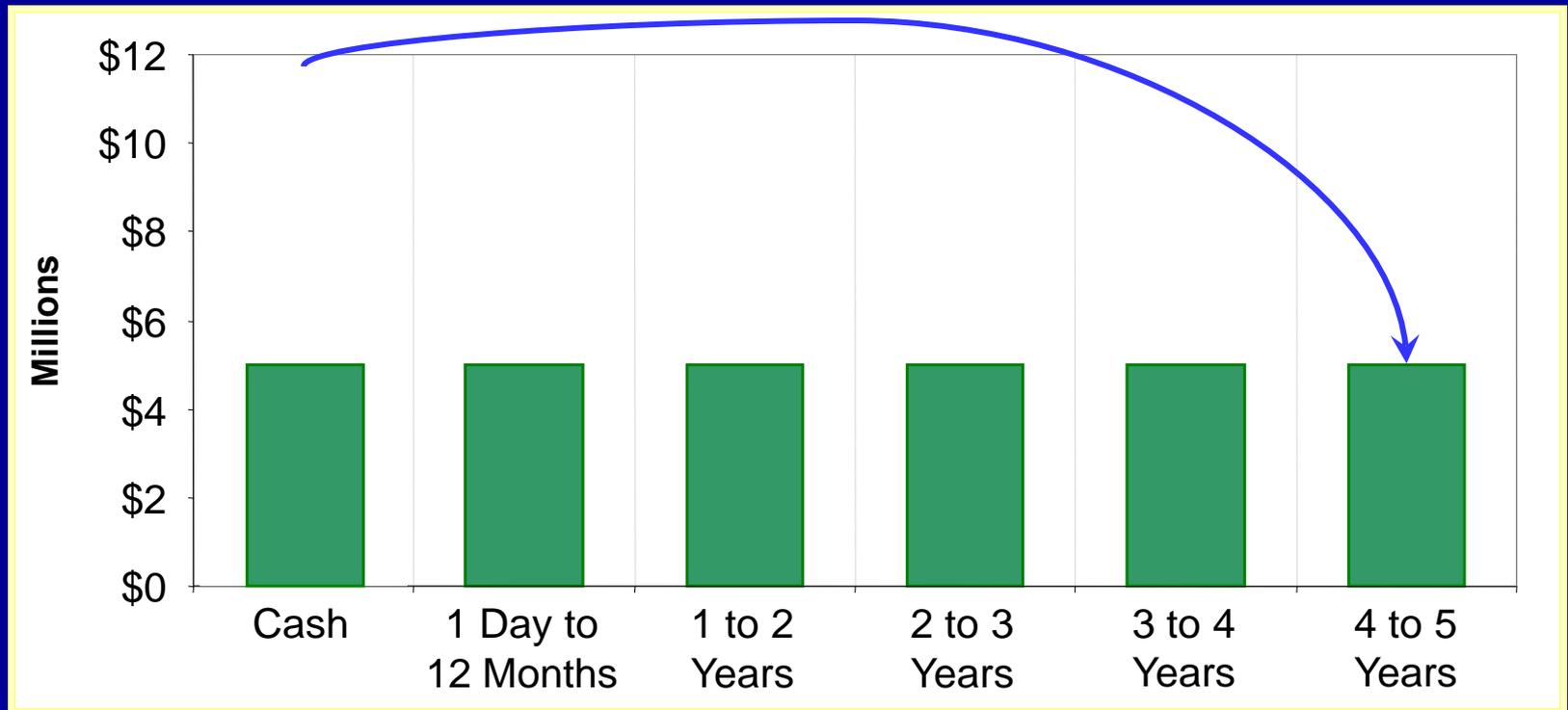
- **Buy new securities to restructure portfolio**
 - Cash on hand
 - Cash from matured securities
 - Cash from sold security

Rebalance with Cash on Hand



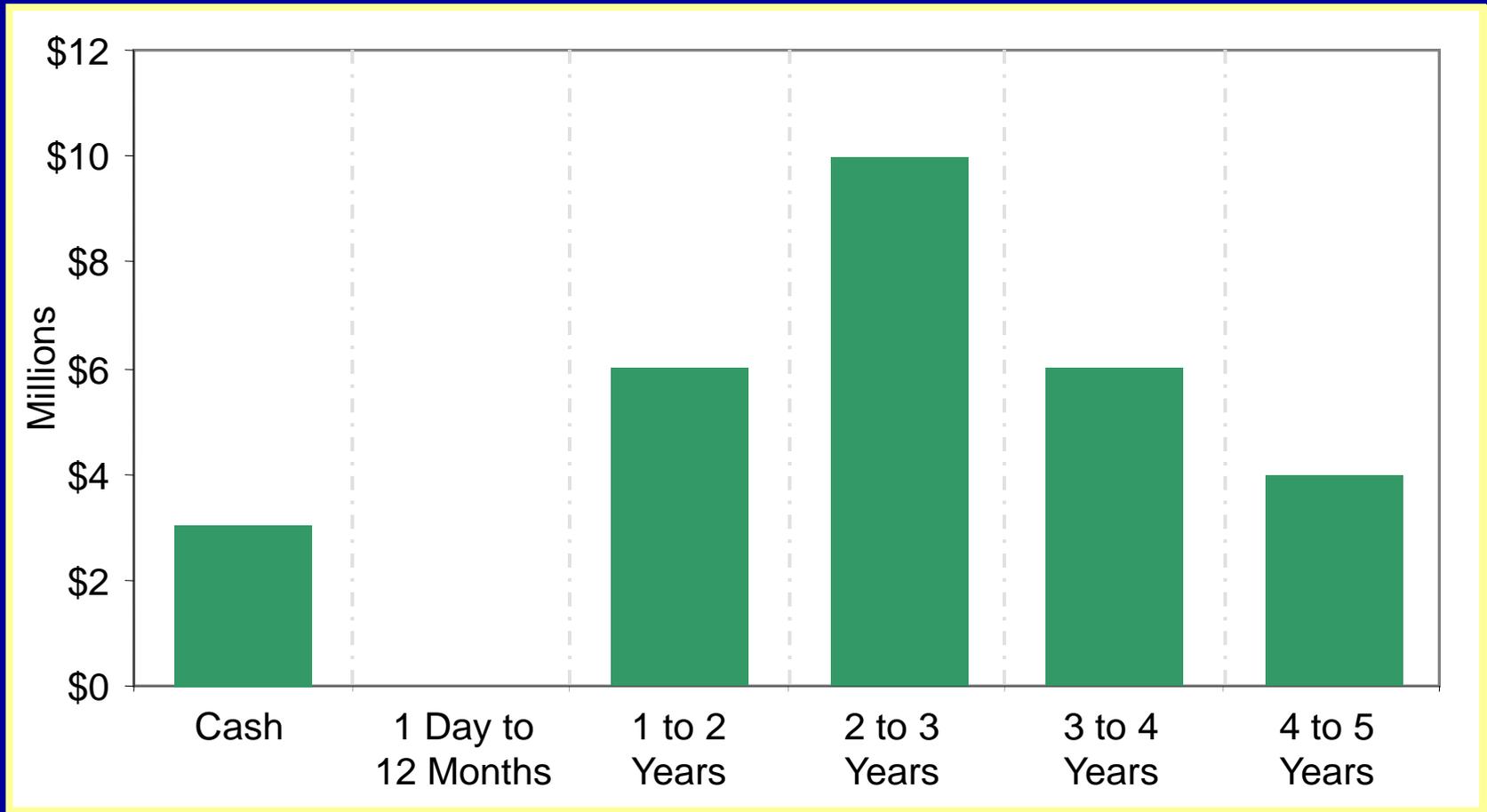
Rebalance with Cash from Maturity

Portfolio with Laddered Maturity Structure



Rebalance with Cash from Sale

Time Passes...



Rebalancing to Maintain the Target Structure

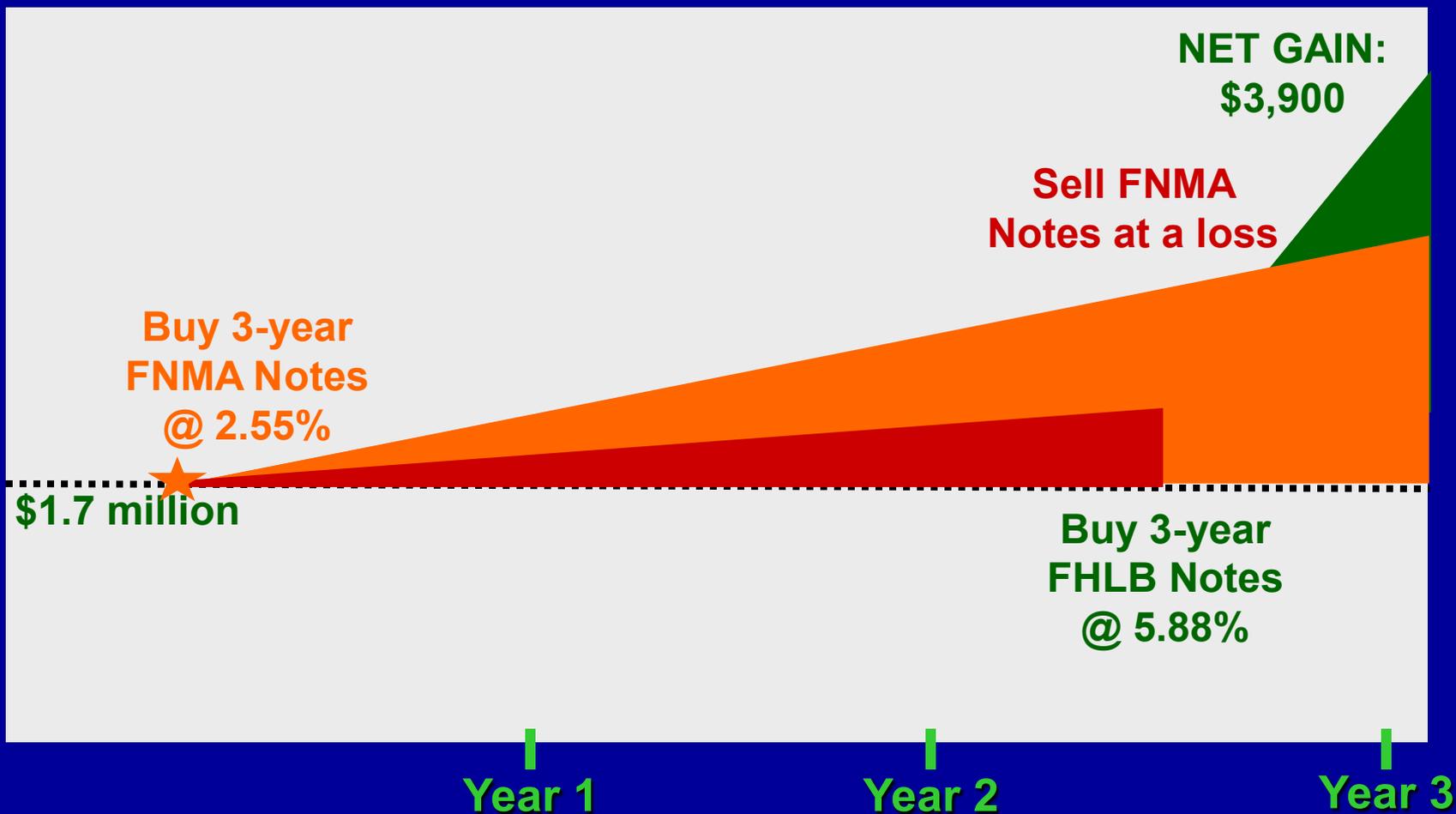
Why Rebalance?

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Mechanics of a Trade



Trade to Extend Duration in Rising Rate Environment

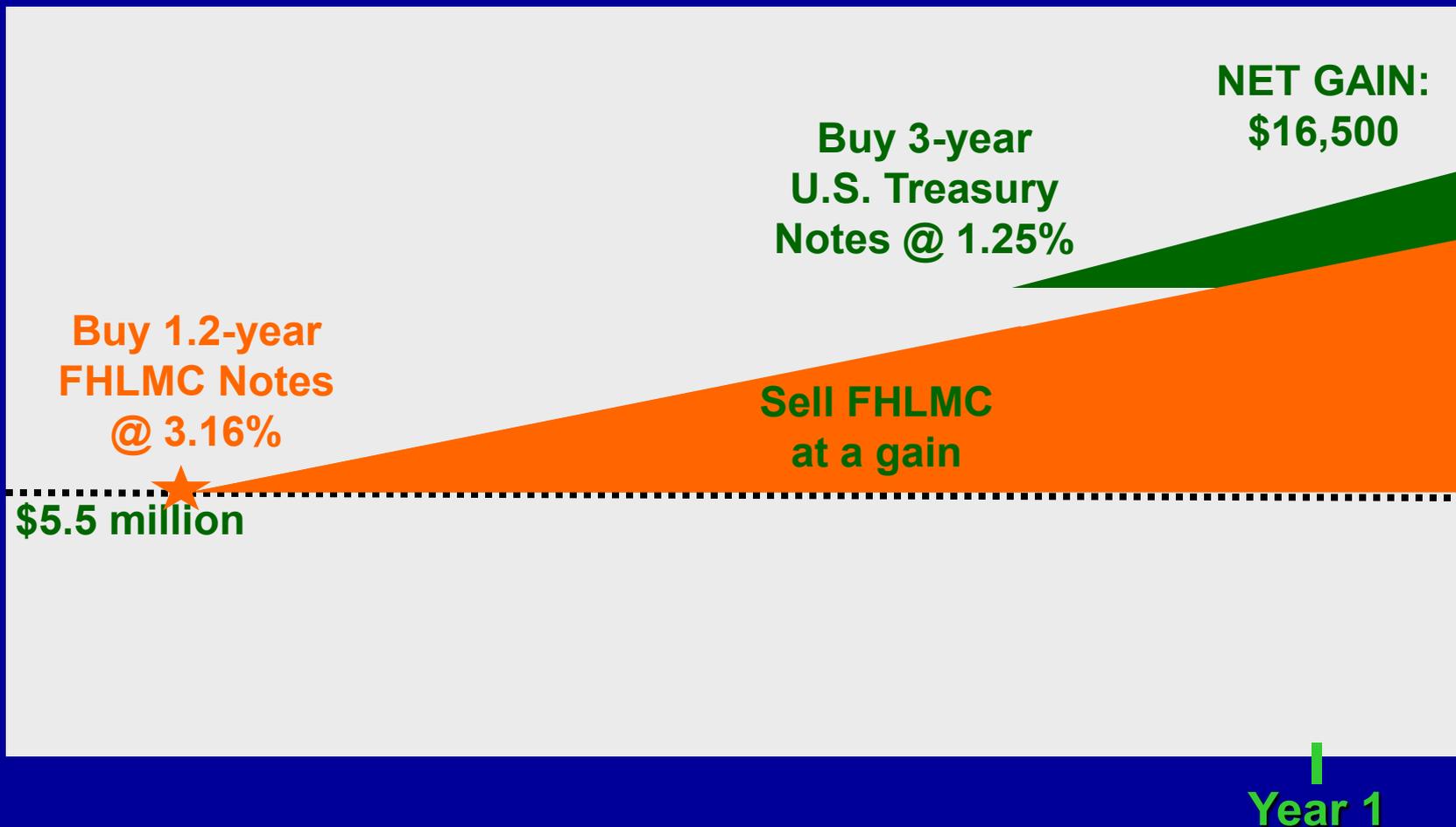


Trade to Extend Duration in Rising Rate Environment

- Extend duration
- Capture attractive yield

	Sale	Purchase
Security	FNMA Notes	FHLB Notes
Time to Maturity	0.6 years	3.0 years
Par	\$1.7 million	\$1.7 million
Yield on Cost	2.55%	5.88%
Gain/(Loss)	(\$28,900)	-
Income to Original Maturity	(\$26,100)	\$58,900
Net Earnings Impact to Maturity of Sold Security		\$3,900

Trade to Swap Sectors and Extend Duration in Falling Rate Environment



Trade to Swap Sectors and Extend Duration in Falling Rate Environment

- Extend duration
- Realize market value appreciation
- Trade into sector with best relative value

	Sale	Purchase
Security	FHLMC Notes	U.S. Treasury notes
Time to Maturity	0.5 years	3 years
Par	\$5.5 million	\$5.5 million
Yield on Cost	3.16%	1.25%
Gain/(Loss)	\$73,500	-
Income to Original Maturity	(\$95,000)	\$38,000
Net Earnings Impact to Maturity of Sold Security		\$16,500

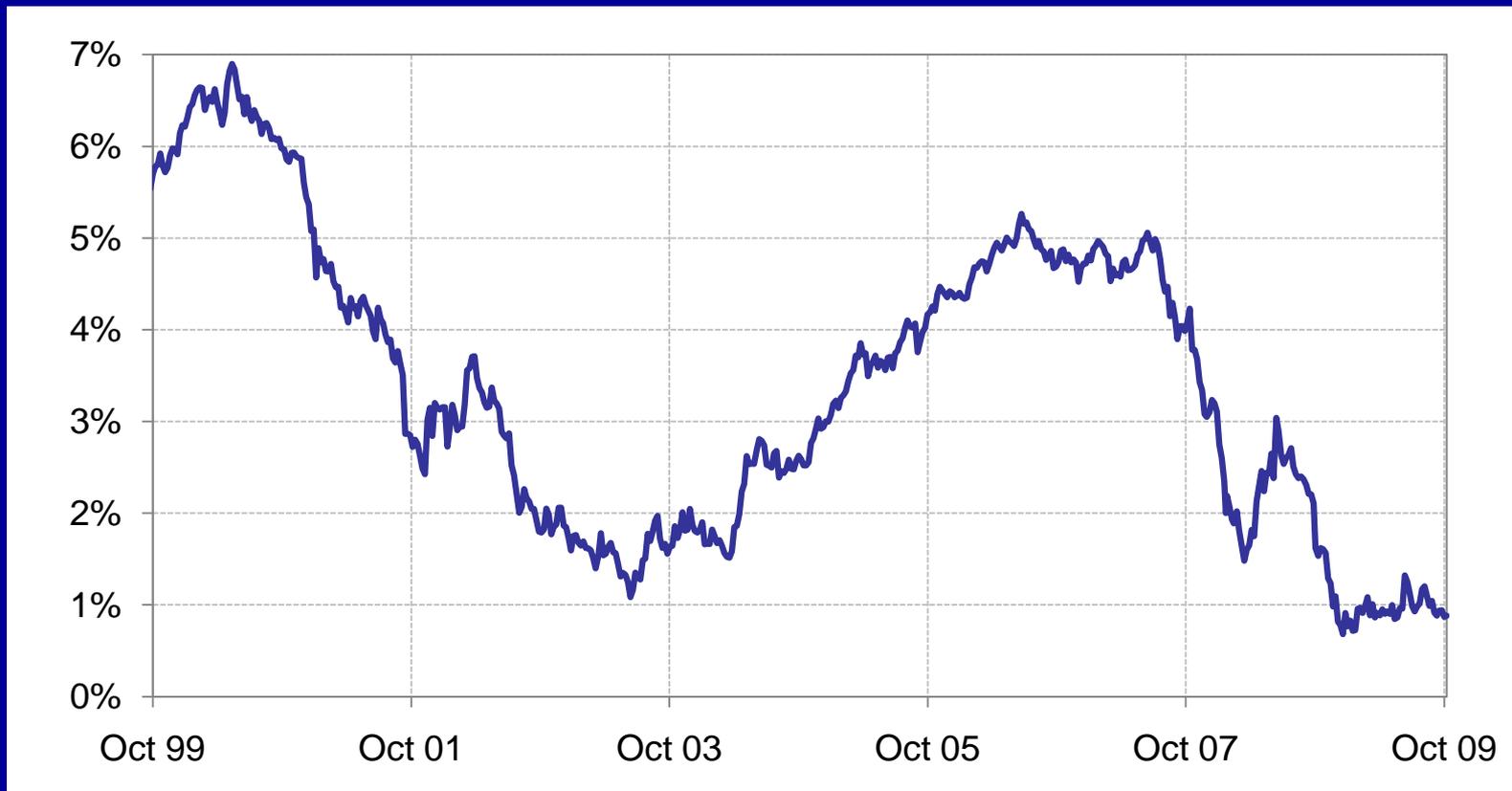
Rebalancing to Respond to a Change

Why Rebalance?

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Changing Market Conditions

2-Year U.S. Treasury Yield History October 1999 – October 2009



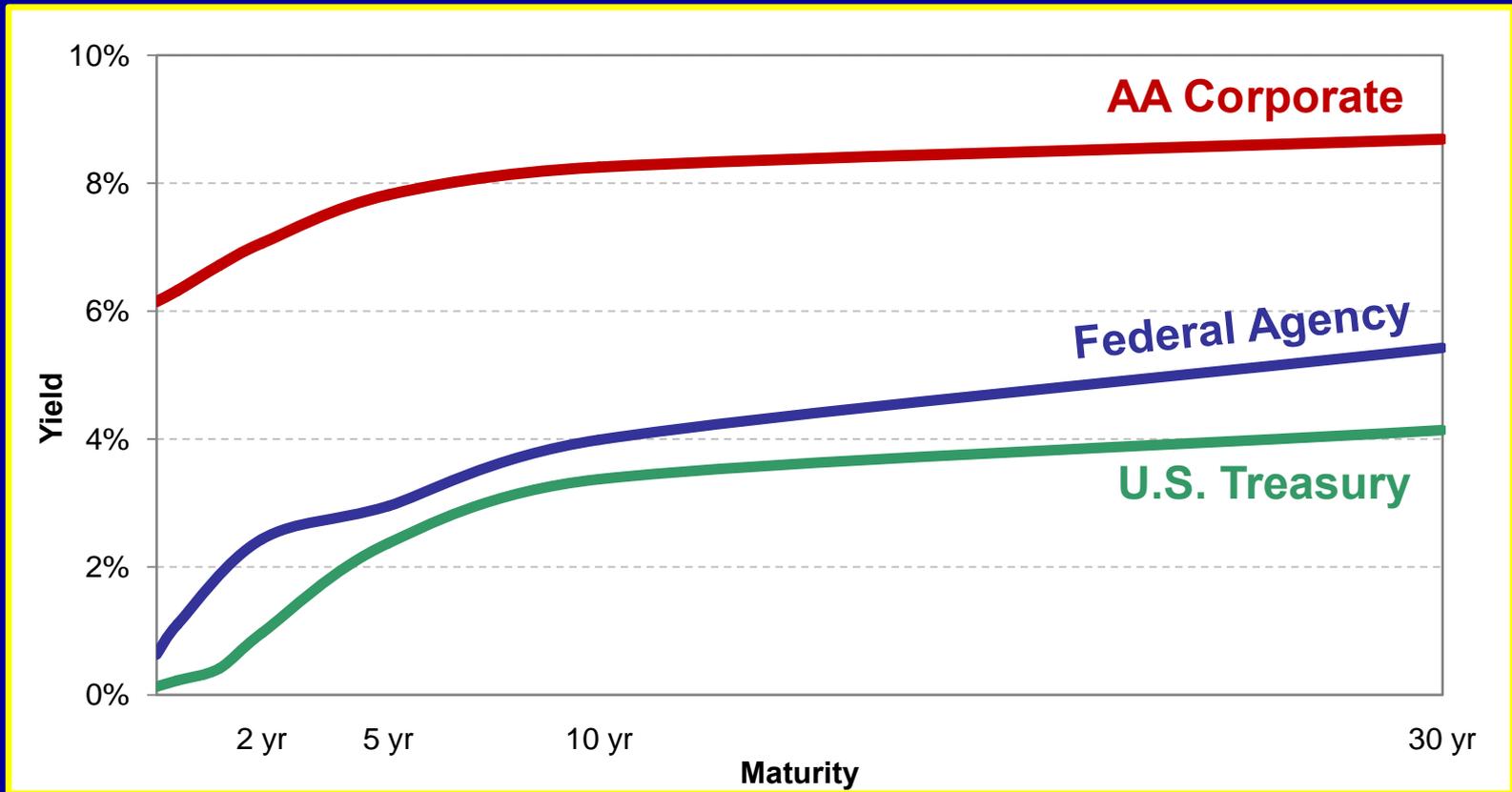
Source: Bloomberg

Rebalancing Trades

Sell	Buy
<p>Short term</p> <p>Long term</p> <p>Callable</p>	<p>Long term</p> <p>Short term</p> <p>Bullet</p>
<p>Deteriorating credit</p> <p>High credit</p>	<p>Higher credit</p> <p>Medium credit</p>

Sector Choice

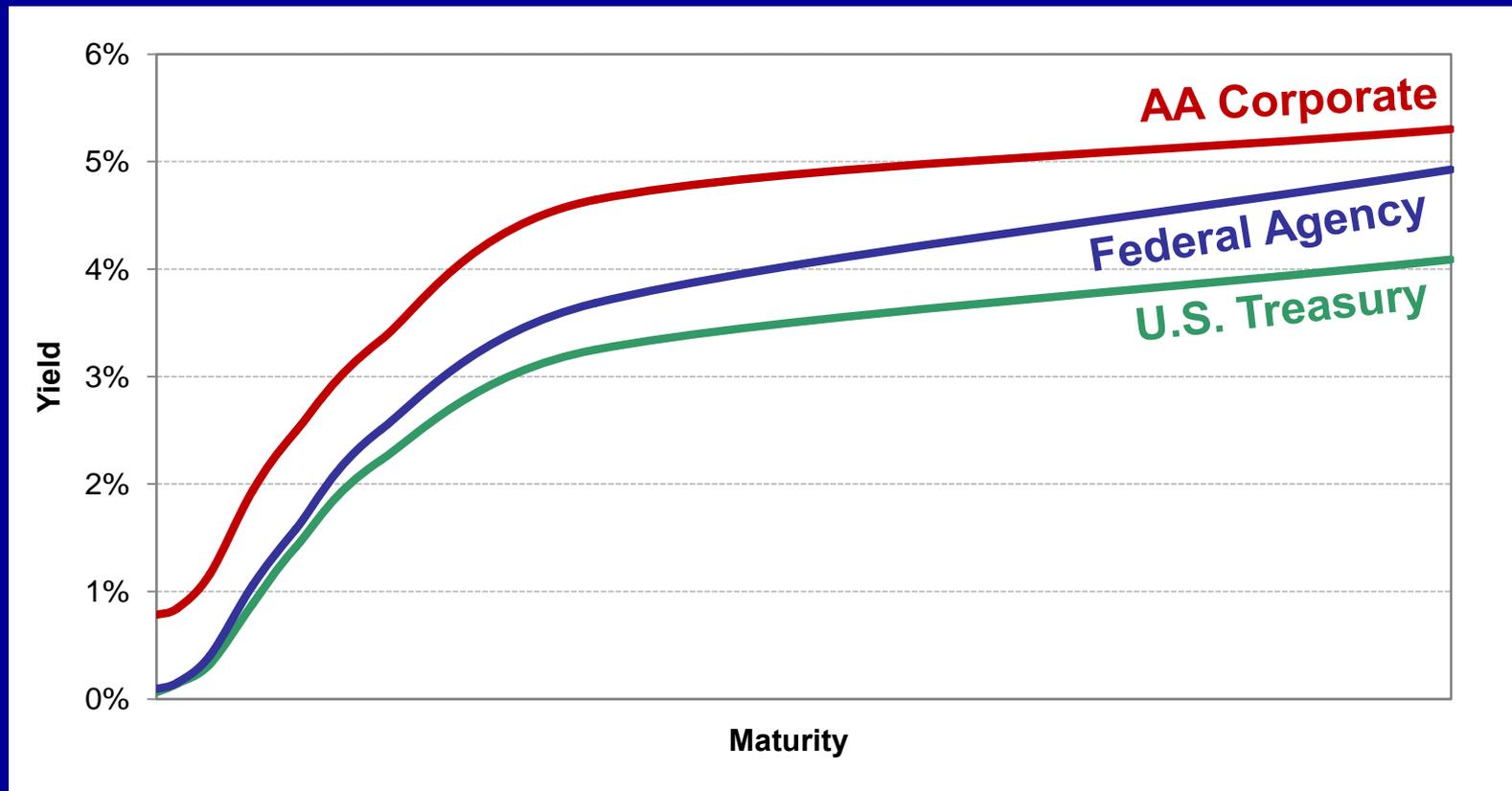
Yield Curves
November 28, 2008



Source: Bloomberg

Sector Choice

Yield Curves
October 8, 2009



Source: Bloomberg

Picking the Best Maturity Range

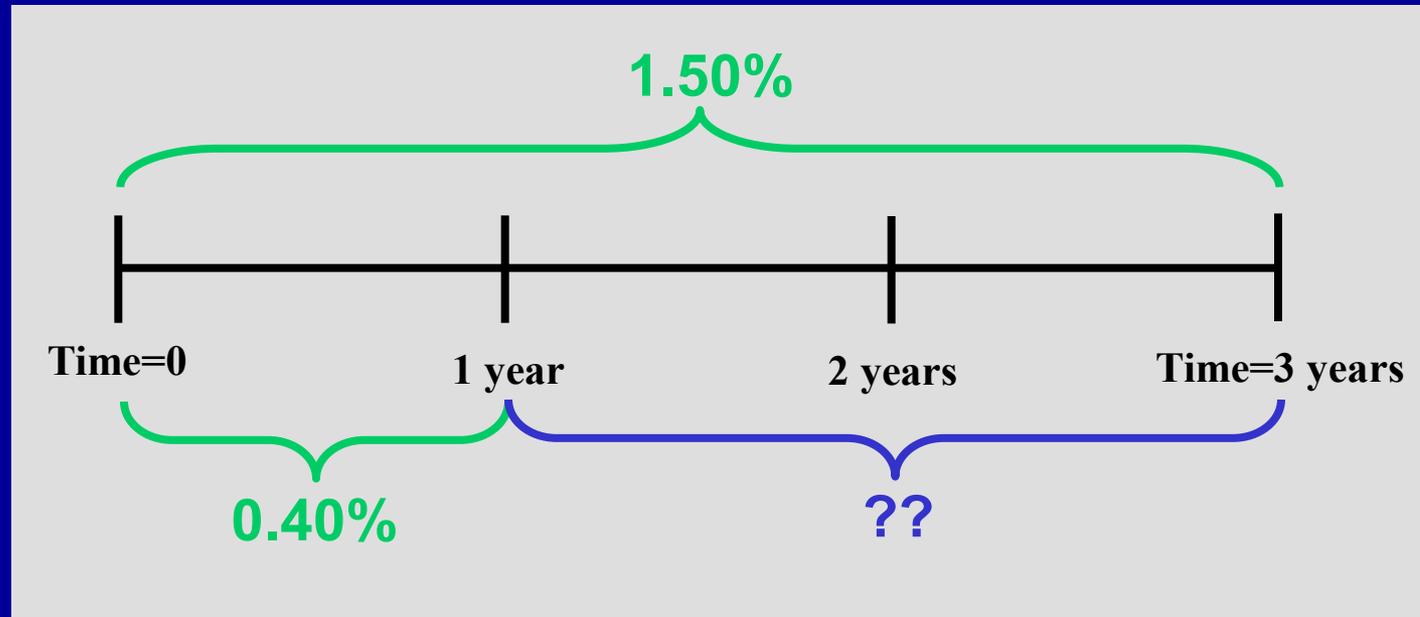
- Considering yields are low and may rise, but the yield curve is very steep, should you buy short or long?

– Which would you buy?

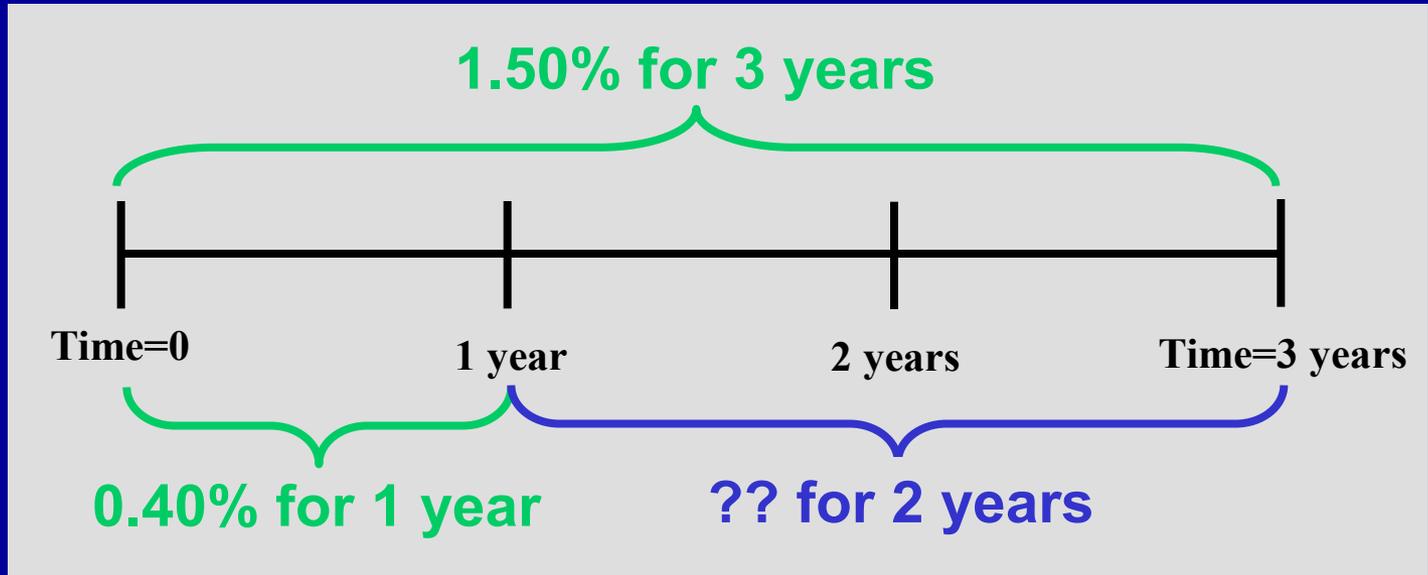
- 1-year investment @ 0.40%
- 3-year investment @ 1.47%

Breakeven Analysis

- Frame the question differently
 - What rate do you have to earn for the last two years to breakeven?



Breakeven Analysis



$$1.50 * 3 \text{ years} = (0.40 * 1 \text{ year}) + (x * 2 \text{ years})$$

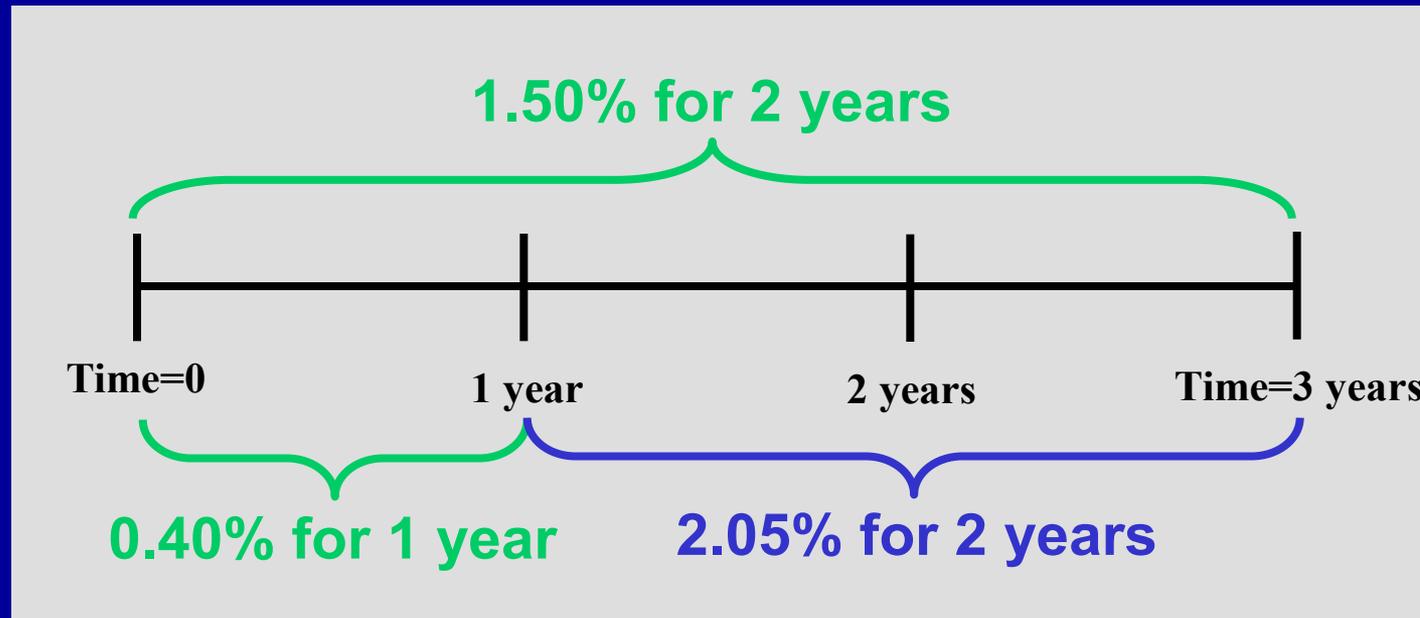
$$4.50 = 0.40 + 2x$$

$$4.10 = 2x$$

$$2.05 = x$$

Breakeven Analysis

- Do you think that rates will rise more than 100 basis points in the next year?
 - If no, buy the 3-year investment
 - If yes, buy the 1-year



Breakeven Analysis

- **How could you know if rates will rise more than 100 basis points in the next year?**
 - **Frame the question differently**
- **There are 8 Fed meetings in the next year.**
- **Is it likely that the Fed will raise rates 25 basis points at 4 of the 8 meetings?**
 - If no, interest rates will remain low and the 3-year is a good choice.
 - If yes, then the 1-year is a good choice.

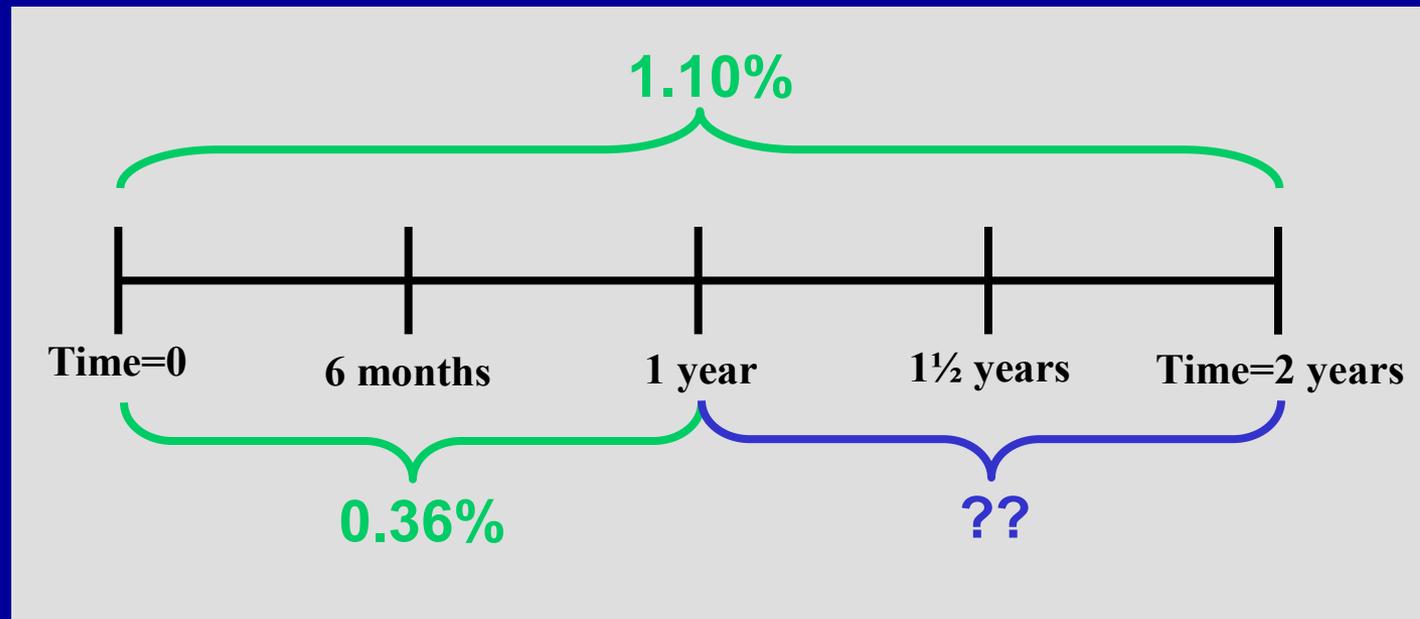
Your Turn: Breakeven Analysis

- Considering yields are low and may rise, but the yield curve is very steep?

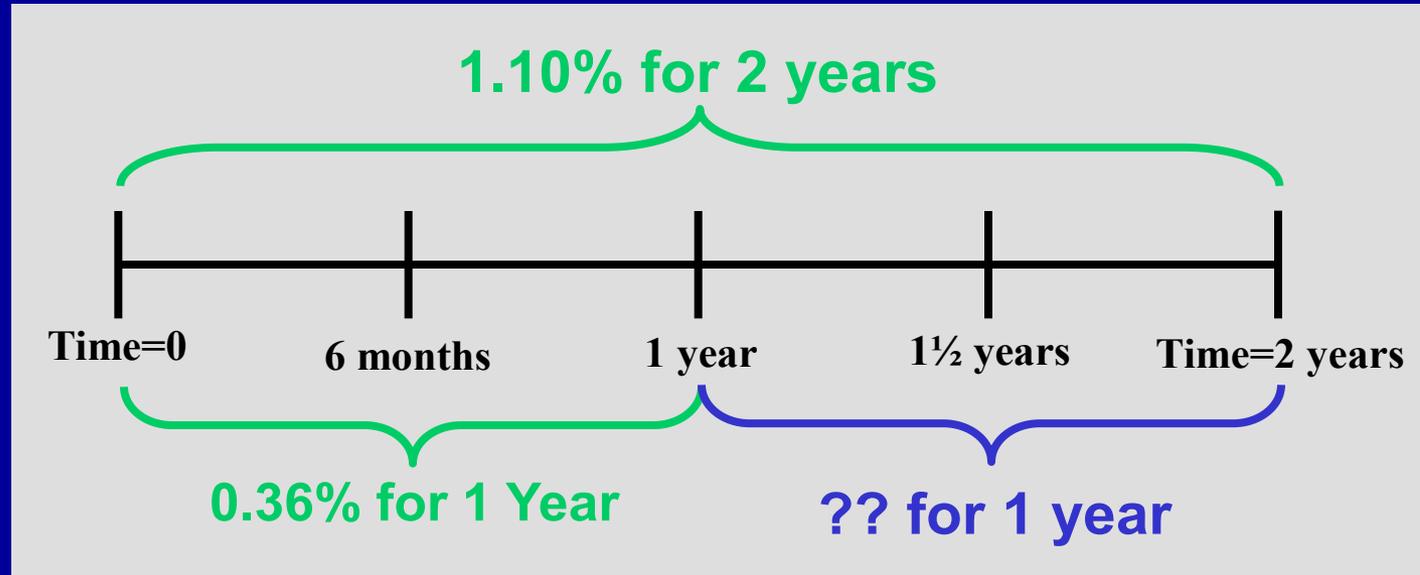
- Which would you buy?
 - 1-year Agency @ 0.36%
 - 2-year Agency @ 1.10%

Your Turn: Breakeven Analysis

- What rate do you have to earn for the last year to breakeven?



Breakeven Analysis



$$1.10 * 2 \text{ years} = (0.36 * 1 \text{ year}) + (x * 1 \text{ year})$$

$$2.20 = 0.36 + x$$

$$1.84 = x$$

How Quickly Will Rates Rise?

- The second step in breakeven analyses is determining if you think that the breakeven rate will come to be.
 - But how can you know?

1. Yield curve analysis

- The yield curve reflects the market's expectations of future rates.

2. Federal Reserve monetary policy

- Federal Reserve has indicated it will keep rates low for an “extended period of time.”

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 - **Strategy**

Follow the News

Bank Failures Tally Tops 98 In 2009

-CNNMoney.com, October 2, 2009

MBIA Downgrade Brings Up Its 'Overlooked' Commercial Exposure

Reuters, September 28, 2009

Dollar Falls After Australia Unexpectedly Raises Interest Rates -

BLOOMBERG NEWS, OCTOBER 6, 2009

U.S. Debates Fate of CIT, a Small-Business Lender

THE NEW YORK TIMES, JULY 14, 2009

B. of A. To Pay \$425 mln To End Government Asset Guarantee-

CBS MarketWatch, September 21, 2009

Bernanke Blasts AIG For 'Irresponsible Bets' That Led to Bailouts

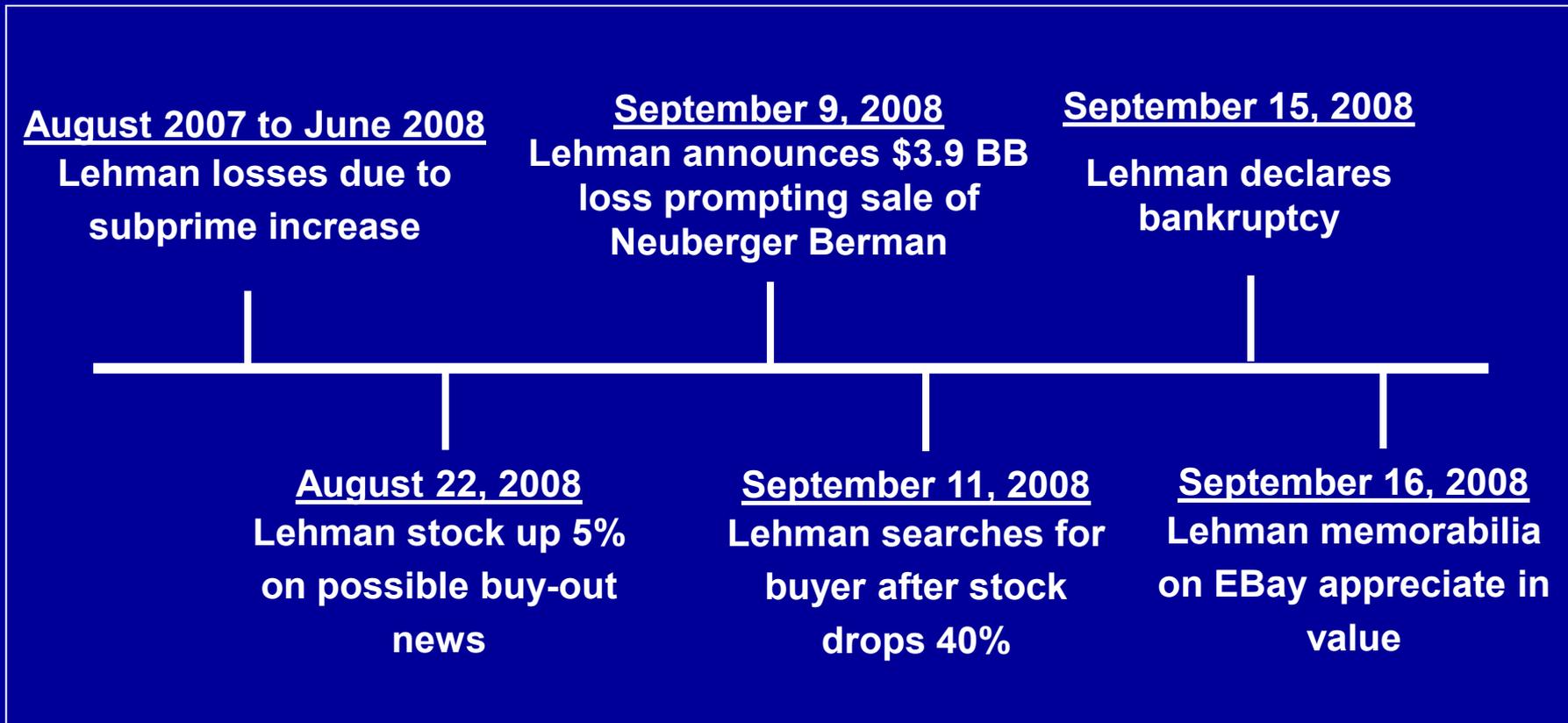
-Washington Post, March 4, 2009

At Lehman, Allaying Fears About Being the Next to Fall

-THE NEW YORK TIMES, MARCH 18, 2008

Monitor News in Corporate Sectors in Your Portfolio

Lehman Brothers: A Cautionary Tale Timeline of the Bankruptcy



Piece of History

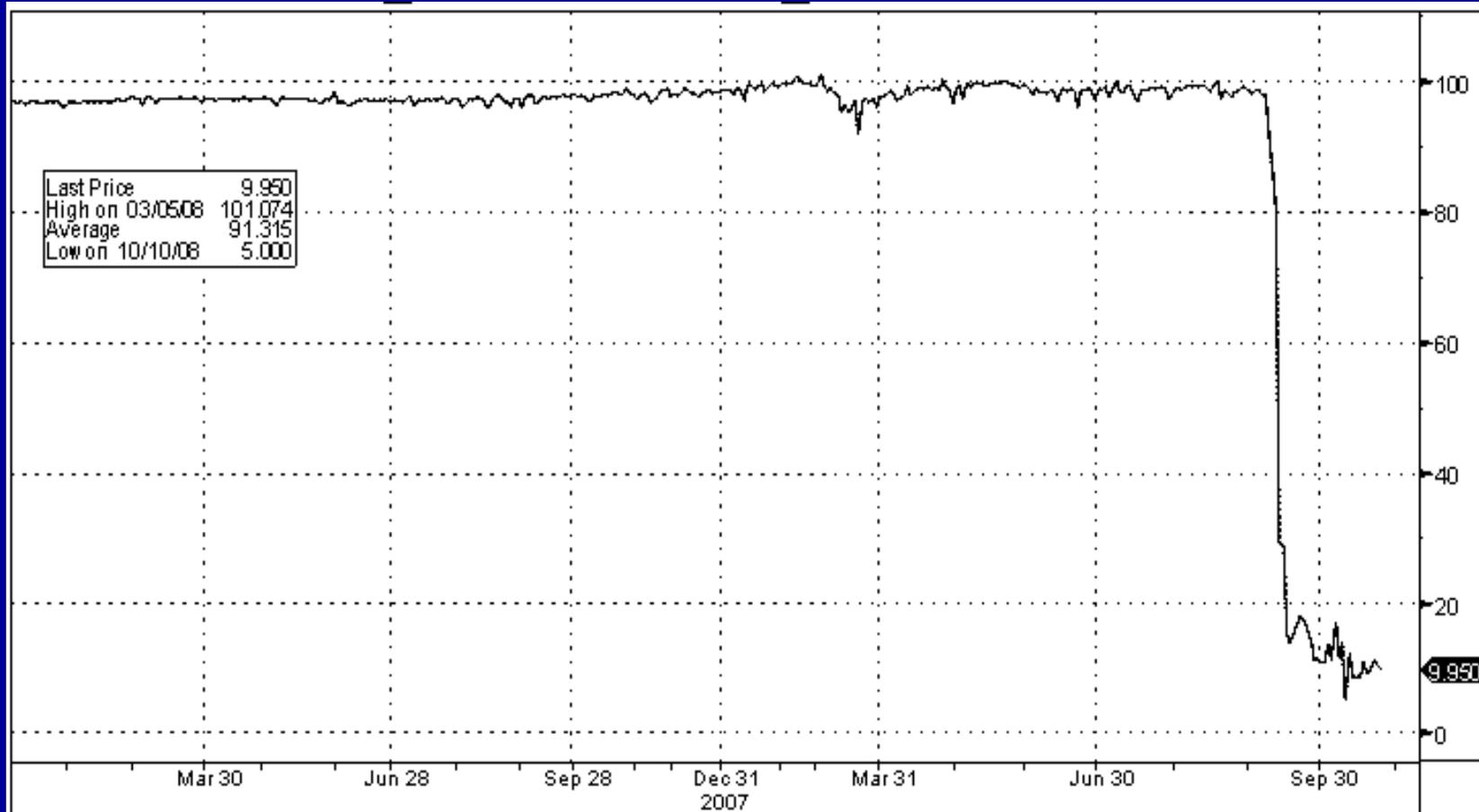


Not For Sale



The Warning Signs – Lehman Brothers

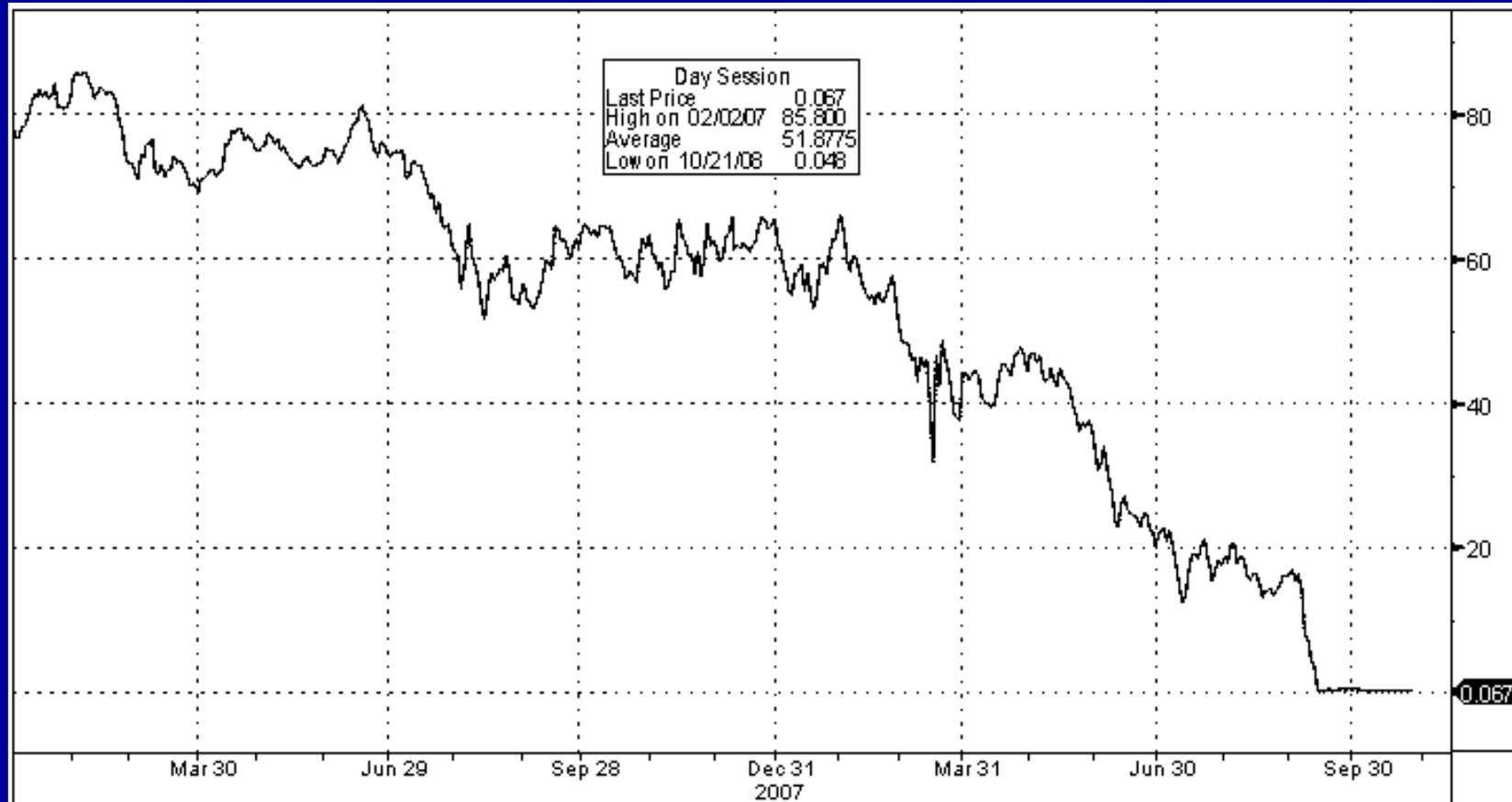
Bond Price
January 2007 – October 2008



Source: Bloomberg

The Warning Signs – Lehman Brothers

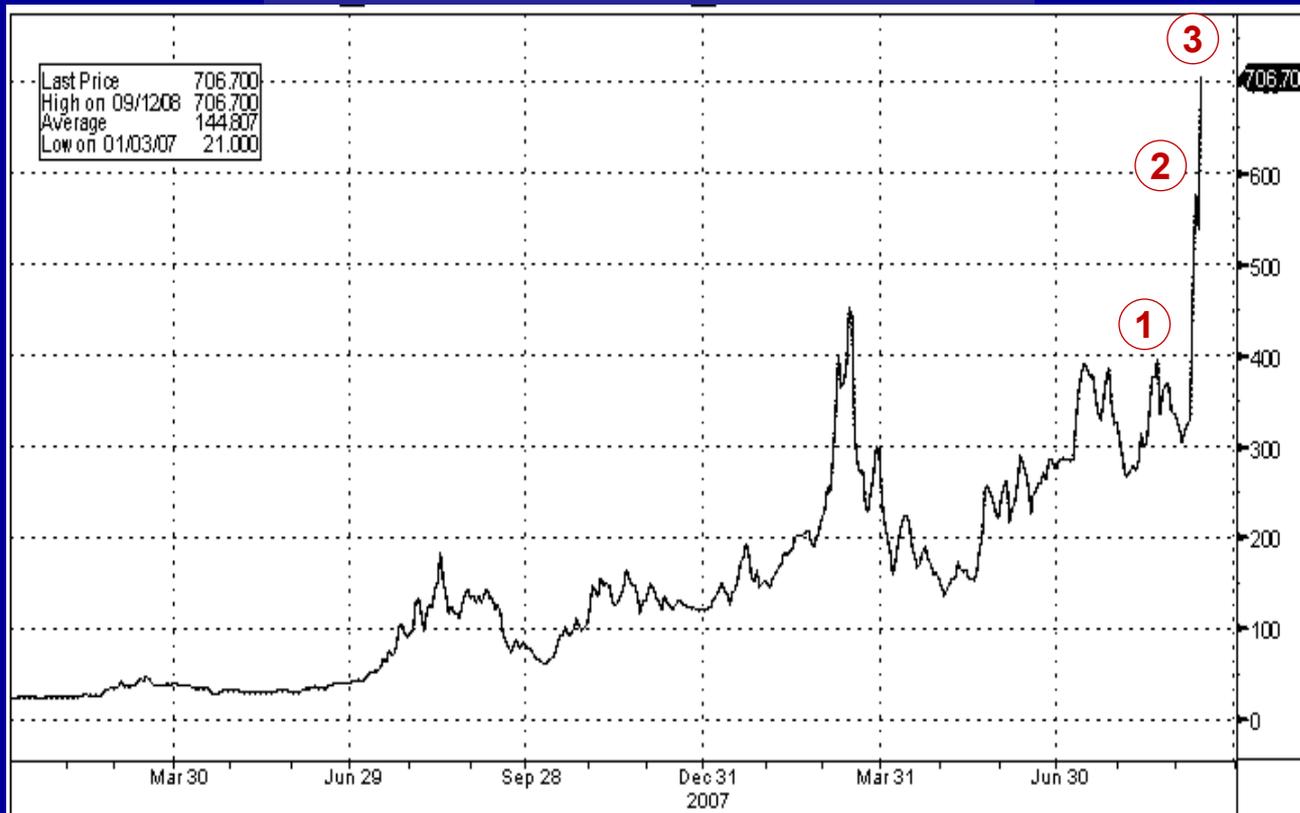
Stock Price
January 2007 – October 2008



Source: Bloomberg

The Warning Signs – Lehman Brothers

Credit Default Spread
January 2007 – October 2008



1. Sep. 9 – Put on negative credit watch by S&P
2. Sep. 15 – Downgraded from A to CCC- by S&P
3. Sep. 16 – Downgraded from CCC- to D by S&P

Warning Signs

CIT Stock Price (A-,Baa1)*
September 2007 – September 2008



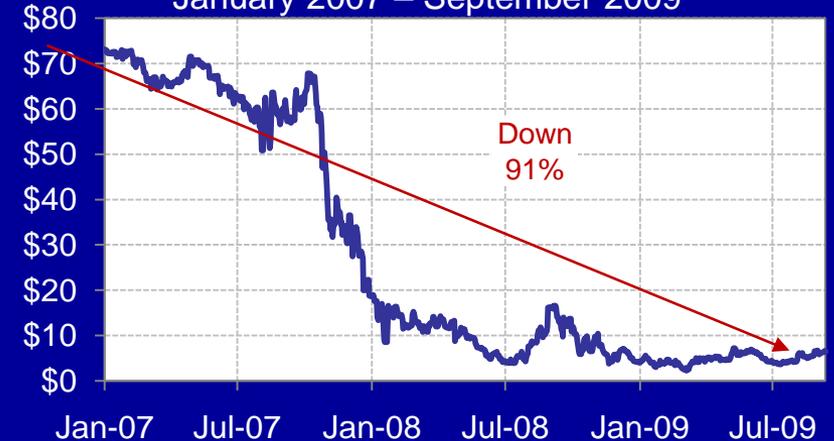
Washington Mutual Stock Price (D,Caa2)*
September 2007 – September 2008



Lehman Brothers Stock Price (NR, B3)*
September 2007 – September 2008



MBIA Stock Price (BB,Ba3)*
January 2007 – September 2009



* Ratings: S&P and Moody's respectively. Source: Bloomberg

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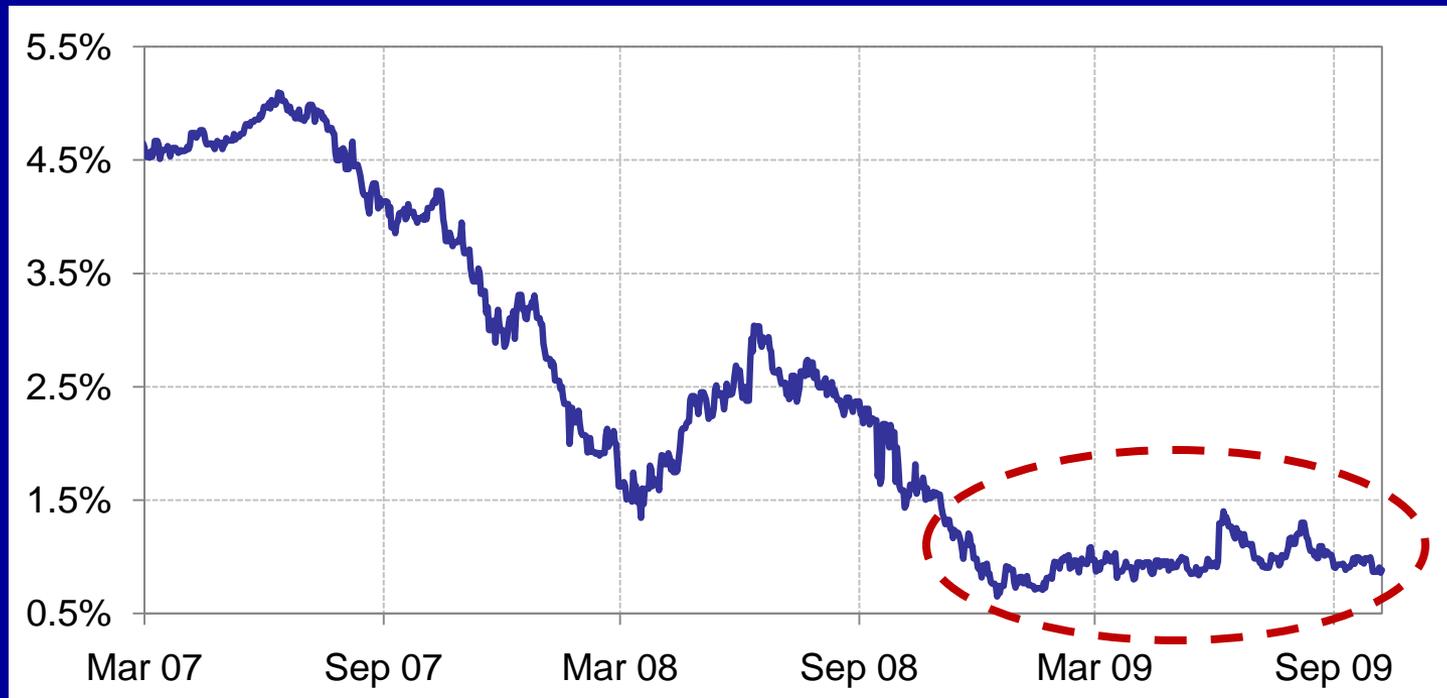
Change in Strategy

- **Go longer**
- **Go shorter**

Change Strategy for Market Reasons

- **Waiting for changes to the current trend.**

2-Year U.S. Treasury Yields
March 2007– October 2009



Source: Bloomberg

Risk and Return Increase With Duration

Common Total Return Benchmarks
10 Years ended September 30, 2009

Merrill Lynch U.S. Treasury Index	Duration	Overall Return	Cumulative Value of \$50 Million	Quarters With Negative Returns
LAIF	0.50 Years	3.54%	\$70,802,199	0 out of 40
1-3 Year	1.93 Years	4.54%	\$77,944,010	4 out of 40
1-5 Year	2.67 Years	5.02%	\$81,639,103	9 out of 40
3-5 Year	3.89 Years	6.00%	\$89,574,805	14 out of 40

Source: Bloomberg-Merrill Lynch Global Bond Indices and LAIF website

Securities with Longer Maturities Outperform

Yield on 2-Year U.S. Treasury Note
1998 - 2008



LAIF and Merrill Lynch U.S. Treasury Index Returns

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Past 10 Years
LAIF	5.35%	6.39%	4.95%	2.69%	1.74%	1.66%	3.05%	4.74%	5.25%	3.19%	3.88%
ML 1-Yr TSY	4.03%	7.32%	7.28%	3.28%	1.45%	0.81%	2.36%	4.32%	5.95%	4.75%	4.13%
ML 1-3 Yr TSY	3.06%	8.00%	8.30%	5.76%	1.90%	0.91%	1.67%	3.96%	7.32%	6.61%	4.71%

Source: Bloomberg—Merrill Lynch Indices and LAIF website

Questions?

- **Thank you!**